



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 185852

TO: Minh-Tam Davis
Location: rem/3A24/3C18
Art Unit: 1642
Thursday, April 20, 2006
Case Serial Number: 09/277064

From: Toby Port
Location: Biotech-Chem Library
REM-1A59
Phone: (571)272-2523

toby.port@uspto.gov

Search Notes

Dear Examiner Davis,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Toby Port
Technical Information Specialist
STIC Biotech/Chem Library
(571)272-2523



73622

185852

mg

STIC-Biotech/ChemLib

From: Chan, Christina
Sent: Tuesday, April 18, 2006 11:48 AM
To: Davis, Minh-Tam; STIC-Biotech/ChemLib
Subject: RE: Rush search request for 09/277064

Please ~~rush~~. Thanks Chris

Chris Chan
TC 1600 New Hire Training Coordinator and SPE 1644
(571)-272-0841
Remsen, 3E89

STIC
APR 18 2006
11:48 AM

-----Original Message-----

From: Davis, Minh-Tam
Sent: Monday, April 17, 2006 2:01 PM
To: Chan, Christina
Subject: Rush search request for 09/277064

Please search in commercial database, issued patent files and PGPUB:
The peptide SEQ ID NO:9, with size limitation for the sequences in the database to the size of SEQ ID NO:9.
Thank lyou.
MINH TAM DAVIS
ART UNIT 1642, ROOM 3A24, MB 3C18
272-0830

Searcher: _____
Searcher Phone: _____
Date Searcher Picked up: _____
Date completed: _____
Searcher Prep Time: _____
Online Time: _____

Type of Search
NA# _____ AA# _____
S/L: _____ Oligomer: _____
Encode/Transl: _____
Structure #: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable
STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other (Specify): _____

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 19:32:05 ; Search time 46 Seconds
(without alignments)
23.365 Million cell updates/sec

Title: US-09-277-064-9
Perfect score: 74
Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 163259

Minimum DB seq length: 0
Maximum DB seq length: 13

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 75 summaries

Database : Issued Patents AA:*
1: /cgn2_6/prodata/1/iaa/5_COMB.pep.*
2: /cgn2_6/prodata/1/iaa/6_COMB.pep.*
3: /cgn2_6/prodata/1/iaa/H_COMB.pep.*
4: /cgn2_6/prodata/1/iaa/PCTUS_COMB.pep.*
5: /cgn2_6/prodata/1/iaa/RE_COMB.pep.*
6: /cgn2_6/prodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	74	100.0	13	1	US-08-305-871A-14
2	74	100.0	13	2	US-08-464-496-19
3	74	100.0	13	3	US-08-788-822A-16
4	74	100.0	13	4	US-08-197-484-113
5	74	100.0	13	5	US-09-311-784A-49
6	74	100.0	13	6	US-09-664-945-50
7	74	100.0	13	7	US-10-372-735-55
8	74	100.0	13	8	PCT-US92-07218-19
9	74	100.0	13	9	PCT-US95-02121-113
10	74	100.0	13	10	PCT-US95-16415-9
11	65	87.8	11	11	US-09-239-043D-1127
12	65	87.8	11	12	US-09-239-043D-1666
13	62	83.8	11	13	US-09-239-043D-392
14	62	83.8	11	14	US-09-239-043D-1442
15	59	79.7	10	15	US-09-239-043D-1148
16	59	79.7	10	16	US-09-239-043D-454
17	58	78.4	10	17	US-09-239-043D-391
18	58	78.4	10	18	US-09-239-043D-1441
19	55	74.3	10	19	US-08-159-339A-402
20	55	74.3	10	20	US-09-239-043D-673
21	55	74.3	10	21	US-09-239-043D-2017
22	54	73.0	9	22	US-09-239-043D-1126
23	51	68.9	9	23	US-08-159-339A-193
24	51	68.9	9	24	US-09-311-784A-198
25	51	68.9	9	25	US-09-239-043D-672
26	51	68.9	9	26	US-09-239-043D-1262
27	51	68.9	9	27	US-09-239-043D-2016

28	51	68.9	9	2	US-09-239-043D-2550	Sequence 2550, Ap
29	47	63.5	8	2	US-09-239-043D-390	Sequence 390, App
30	47	63.5	8	2	US-09-239-043D-1261	Sequence 1261, Ap
31	45	60.8	12	2	US-08-602-999A-288	Sequence 288, App
32	45	60.8	12	2	US-09-500-124-268	Sequence 268, App
33	44	59.5	8	2	US-09-239-043D-1131	Sequence 1131, Ap
34	44	59.5	10	1	US-08-737-085A-7	Sequence 7, Appli
35	44	59.5	10	2	US-09-246-258-7	Sequence 7, Appli
36	44	59.5	10	2	US-09-532-106-7	Sequence 7, Appli
37	44	59.5	10	2	US-09-839-666-7	Sequence 7, Appli
38	44	59.5	10	2	US-10-372-735-66	Sequence 66, Appli
39	44	59.5	11	2	US-09-239-043D-1132	Sequence 1132, Ap
40	42	56.8	11	2	US-09-904-117-6	Sequence 6, Appli
41	42	56.8	13	1	US-08-737-085A-20	Sequence 20, Appli
42	42	56.8	13	2	US-09-246-258-20	Sequence 20, Appli
43	42	56.8	13	2	US-09-532-106-20	Sequence 20, Appli
44	42	56.8	13	2	US-09-839-666-20	Sequence 20, Appli
45	42	56.8	13	2	US-10-372-735-125	Sequence 125, App
46	39	52.7	8	1	US-08-737-085A-6	Sequence 6, Appli
47	39	52.7	8	2	US-09-246-258-6	Sequence 6, Appli
48	39	52.7	8	2	US-09-532-106-6	Sequence 6, Appli
49	39	52.7	8	2	US-09-839-666-6	Sequence 6, Appli
50	39	52.7	8	2	US-10-372-735-65	Sequence 65, Appli
51	39	52.7	10	2	US-09-239-043D-1129	Sequence 1129, Ap
52	38	51.4	11	1	US-08-336-343A-26	Sequence 26, Appli
53	38	51.4	11	2	US-08-652-877-23	Sequence 23, Appli
54	38	51.4	11	2	US-08-476-515A-23	Sequence 23, Appli
55	37	50.0	10	1	US-08-477-509B-11	Sequence 11, Appli
56	37	50.0	10	2	US-08-482-085B-11	Sequence 11, Appli
57	37	50.0	10	2	US-09-444-791A-11	Sequence 11, Appli
58	37	50.0	12	2	US-09-428-082B-313	Sequence 313, App
59	36	48.6	12	1	US-08-459-568-61	Sequence 61, Appli
60	36	48.6	12	1	US-08-399-411-61	Sequence 61, Appli
61	36	48.6	12	2	US-08-516-859A-61	Sequence 61, Appli
62	36	48.6	12	2	US-09-078-173A-22	Sequence 22, Appli
63	36	48.6	12	2	US-09-586-472-61	Sequence 61, Appli
64	36	48.6	12	2	US-09-528-706-61	Sequence 61, Appli
65	36	48.6	12	2	US-09-428-082B-312	Sequence 312, App
66	36	48.6	12	2	US-10-042-991-22	Sequence 22, Appli
67	36	48.6	13	2	US-09-078-173A-23	Sequence 23, Appli
68	36	48.6	13	2	US-10-042-991-23	Sequence 23, Appli
69	35	47.3	9	2	US-09-239-043D-647	Sequence 647, App
70	35	47.3	9	2	US-09-239-043D-2000	Sequence 2000, Ap
71	35	47.3	10	1	US-08-230-047-11	Sequence 11, Appli
72	35	47.3	11	2	US-09-311-784A-181	Sequence 181, App
73	35	47.3	11	2	US-09-239-043D-566	Sequence 566, App
74	35	47.3	11	2	US-09-239-043D-1829	Sequence 1829, Ap
75	35	47.3	12	2	US-10-372-735-199	Sequence 199, App

ALIGNMENTS

RESULT 1
US-08-305-871A-14
; Sequence 14, Application US/08305871A
; Patent No. 5736142
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Gaeta, Federico
; APPLICANT: Grey, Howard M.
; APPLICANT: Sidney, John
; APPLICANT: Alexander, Jeffrey L.
; TITLE OF INVENTION: Alteration of Immune Response Using Pan
; CORRESPONDENCE ADDRESS:
; NUMBER OF INVENTIONS: 29
; CORRESPONDENCE ADDRESS:
; ADDRESS: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICANT: Patentin Release #1.0, Version #1.30
FILING DATE: 14-SEP-1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/121,101
FILING DATE: 14-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 14137-0062-10
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-305-871A-14

Query Match 100.0%; Score 74; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
DB 1 TPPAYRPPNAPIL 13

RESULT 2
US-08-464-496-19
Sequence 19, Application US/08464496
Patent No. 6322789-
GENERAL INFORMATION:
APPLICANT: Epimmune, Inc.
APPLICANT: Vitello, Maria
APPLICANT: Chesnut, Robert
TITLE OF INVENTION: HLA-RESTRICTED HEPATITIS B VIRUS CTL
FILE REFERENCE: 39963-20001.13
CURRENT APPLICATION NUMBER: US/08/464,496
CURRENT FILING DATE: 1995-06-05
PRIOR FILING DATE: 1992-08-26
PRIOR FILING DATE: 1992-08-26
PRIOR FILING DATE: 1992-04-27
PRIOR FILING DATE: 1992-04-27
PRIOR FILING DATE: 1992-01-29
PRIOR FILING DATE: 1991-08-26
NUMBER OF SEQ ID NOS: 75
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 19
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: T helper epitope HBC 128-140
US-08-464-496-19

Query Match 100.0%; Score 74; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13

DB 1 TPPAYRPPNAPIL 13
RESULT 3
US-08-788-822A-16
Sequence 16, Application US/08788822A
Patent No. 6413935
GENERAL INFORMATION:
APPLICANT: Alexander, Jeffrey L.
APPLICANT: Defrees, Shawn
APPLICANT: Sette, Alessandro
TITLE OF INVENTION: Induction of Immune Response Against
TITLE OF INVENTION: Desired Determinants
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/788,822A
FILING DATE: 23-JAN-1997
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/010,510
FILING DATE: 24-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 014137-009210US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-788-822A-16

Query Match 100.0%; Score 74; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
DB 1 TPPAYRPPNAPIL 13

RESULT 4
US-08-197-484-13
Sequence 113, Application US/08197484
Patent No. 6419931
GENERAL INFORMATION:
APPLICANT: VITELLO, Maria A.
APPLICANT: CHESTNUT, Robert W.
APPLICANT: SETTE, Alessandro D.
APPLICANT: CELIS, Betteban
APPLICANT: GRAY, Howard
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
TITLE OF INVENTION: CTL IMMUNITY
NUMBER OF SEQUENCES: 153
CORRESPONDENCE ADDRESS:
US-08-197-484-13

ADDRESSEE: Townsend and Townsend Khourie and Crew
STREET: Steuart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/197,484
FILING DATE: 16-FEB-1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/935,811
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/874,491
FILING DATE: 27-APR-1992
APPLICATION NUMBER: US 07/827,682
FILING DATE: 29-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/749,568
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Parmelee, Steven W.
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 14137-26-4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 467-9600
TELEFAX: (206) 623-6793
INFORMATION FOR SEQ ID NO: 113:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-197-484-113

Query Match 100.0%; Score 74; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 5
US-09-311-784A-49
; Sequence 49, Application US/09311784A
; Patent No. 6534482
; GENERAL INFORMATION:
; APPLICANT: Fikes, John D.
; APPLICANT: Hermanson, Gary G.
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn Y.
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert W.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Expression Vectors for Stimulating an
; TITLE OF INVENTION: Immune Response and Methods of Using the Same
; FILE REFERENCE: 39963-20022.01
; CURRENT APPLICATION NUMBER: US/09/311,784A
; PRIOR FILING DATE: 1999-05-13
; PRIOR APPLICATION NUMBER: US 60/085,751
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 49
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
US-09-311-784A-49

Query Match 100.0%; Score 74; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 6
US-09-664-945-50
; Sequence 50, Application US/09664945
; Patent No. 6660842
; GENERAL INFORMATION:
; APPLICANT: Matti Sallberg
; TITLE OF INVENTION: LIGAND/RECEPTOR SPECIFICITY EXCHANGERS
; TITLE OF INVENTION: THAT REDIRECT ANTIBODIES TO RECEPTORS ON A PATHOGEN
; FILE REFERENCE: TRIPEP.007CP3
; CURRENT APPLICATION NUMBER: US/09/664,945
; CURRENT FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 09/532,106
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 09/246,258
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 08/737,085
; PRIOR FILING DATE: 1996-12-27
; PRIOR APPLICATION NUMBER: SE 9401460
; PRIOR FILING DATE: 1994-04-28
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 50
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antigenic domain peptide
US-09-664-945-50

Query Match 100.0%; Score 74; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 7
US-10-372-735-55
; Sequence 55, Application US/10372735
; Patent No. 6933366
; GENERAL INFORMATION:
; APPLICANT: Sallberg, Matti
; TITLE OF INVENTION: SPECIFICITY EXCHANGERS THAT REDIRECT
; TITLE OF INVENTION: ANTIBODIES TO A PATHOGEN
; FILE REFERENCE: TRIPEP.7AUC4CP1
; CURRENT APPLICATION NUMBER: US/10/372,735
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: 10/234,579
; PRIOR FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: 09/839,666
; PRIOR FILING DATE: 2001-04-19
; PRIOR APPLICATION NUMBER: 09/532,106
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 09/246,258

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; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 08/737,085
; PRIOR FILING DATE: 1996-12-27
; PRIOR APPLICATION NUMBER: PCT/SE95/00468
; PRIOR FILING DATE: 1995-04-27
; PRIOR APPLICATION NUMBER: 09/664,945
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 09/664,025
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: PCT/IB01/02327
; PRIOR FILING DATE: 2001-09-19
; PRIOR APPLICATION NUMBER: 10/153,271
; PRIOR FILING DATE: 2002-05-21
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 199
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 55
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificially Synthesized Peptides
US-10-372-735-55

Query Match 100.0%; Score 74; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
DB 1 TPPAYRPPNAPIL 13

RESULT 8
PCT-US92-07218-19
; Sequence 19, Application PC/TUS9207218
; GENERAL INFORMATION:
; APPLICANT: Vitiello, Maria A.
; TITLE OF INVENTION: HLA-RESTRICTED HEPATITIS B VIRUS CTL
; TITLE OF INVENTION: EPITOPES
; NUMBER OF SEQUENCES: 35
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend
; STREET: One Market Plaza, Stewart Street Tower
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94105
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/07218
; FILING DATE: 19920826
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/749,568
; FILING DATE: 26-AUG-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/827,682
; FILING DATE: 29-JAN-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 14137-26-3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400

```

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; TELEFAX: 415-543-5043
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: AMINO ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US92-07218-19

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
DB 1 TPPAYRPPNAPIL 13

RESULT 9
PCT-US95-02121-113
; Sequence 113, Application PC/TUS9502121
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
; TITLE OF INVENTION: CTL IMMUNITY
; NUMBER OF SEQUENCES: 153
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/02121
; FILING DATE: 16-FEB-1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/197,484
; FILING DATE: 16-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/935,811
; FILING DATE: 26-AUG-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/874,491
; FILING DATE: 27-APR-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/827,682
; FILING DATE: 29-JAN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/749,568
; FILING DATE: 26-AUG-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Parmelee, Steven W.
; REGISTRATION NUMBER: 31,990
; REFERENCE/DOCKET NUMBER: 14137-26-4PC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 467-9600
; TELEFAX: (415) 543-5043
; INFORMATION FOR SEQ ID NO: 113:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; OTHER INFORMATION:
PCT-US95-02121-113

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13

```

```

Db      1  TTPAYRPPNAPIL 13

RESULT 10
PCT-US95-16415-9
; Sequence 9, Application PC/TUS9516415
; GENERAL INFORMATION:
; APPLICANT: The Scripps Research Institute
; TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC
; CYTOTOXIC T CELLS
; NUMBER OF SEQUENCES: 38
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: The Scripps Research Institute
; STREET: 10666 North Torrey Pines Road, TPC-8
; CITY: La Jolla
; STATE: California
; COUNTRY: US
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/16415
; FILING DATE: 13-DEC-1995
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/355,558
; FILING DATE: 14-DEC-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Logan, April C.
; REGISTRATION NUMBER: 33,950
; REFERENCE/DOCKET NUMBER: 433.1PC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 554-2937
; TELEFAX: (619) 554-6312
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
PCT-US95-16415-9

Query Match      100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  TTPAYRPPNAPIL 13
Db      1  TTPAYRPPNAPIL 13

RESULT 11
US-09-239-043D-1127
; Sequence 1127, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D

Query Match      87.8%; Score 65; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0041;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2  PPAYRPPNAPI 12
Db      1  PPAYRPPNAPI 11

RESULT 12
US-09-239-043D-1666
; Sequence 1666, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D

CURRENT FILING DATE: 1999-01-27
PRIOR FILING DATE: 1998-11-10
PRIOR FILING DATE: 1997-11-25
PRIOR FILING DATE: 1997-03-12
PRIOR FILING DATE: 1996-03-13
PRIOR FILING DATE: 1995-06-05
PRIOR FILING DATE: 1994-12-01
PRIOR FILING DATE: 1994-11-23
PRIOR FILING DATE: 1994-07-21
PRIOR FILING DATE: 1994-03-04
PRIOR FILING DATE: 1994-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 2579
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 1127
LENGTH: 11
TYPE: PRT
ORGANISM: Orthohepadnaviridae hepatitis B virus
US-09-239-043D-1127

```

```
; PRIOR APPLICATION NUMBER: US 08/278,634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197,484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2579
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1666
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
US-09-239-043D-1666

Query Match      87.8%; Score 65; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.0041;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy  2 PPAYRPPNAPI 12
Db  1 PPAYRPPNAPI 11

RESULT 13
US-09-239-043D-392
; Sequence 392, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344,824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278,634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197,484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2579
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 392
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
US-09-239-043D-392
```

```
Query Match      83.8%; Score 62; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy  3 PAYRPPNAPIL 13
Db  1 PAYRPPNAPIL 11

RESULT 14
US-09-239-043D-1442
; Sequence 1442, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344,824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278,634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197,484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2579
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1442
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
US-09-239-043D-1442

Query Match      83.8%; Score 62; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.011;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy  3 PAYRPPNAPIL 13
Db  1 PAYRPPNAPIL 11

RESULT 15
US-09-239-043D-1148
; Sequence 1148, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
```

```

; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344,824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278,634
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/197,484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2579
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1148
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
US-09-239-043D-1148

Query Match 79.7%; Score 59; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.025;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNA 10
Db 1 TPPAYRPPNA 10
|||||

RESULT 16
US-09-239-043D-454
; Sequence 454, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702

```

```

; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344,824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278,634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197,484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2579
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 454
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
US-09-239-043D-454

Query Match 79.7%; Score 59; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.028;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNA 10
Db 2 TPPAYRPPNA 11
|||||

RESULT 17
US-09-239-043D-391
; Sequence 391, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344,824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278,634
; PRIOR FILING DATE: 1994-07-21

```

; PRIOR APPLICATION NUMBER: US 08/205,713
 ; PRIOR FILING DATE: 1994-03-04
 ; PRIOR APPLICATION NUMBER: US 08/197,484
 ; PRIOR FILING DATE: 1994-02-16
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 2579
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 391
 ; LENGTH: 10
 ; TYPE: PRT
 ; ORGANISM: Orthohepadnaviridae hepatitis B virus
 US-09-239-043D-391

Query Match 78.4%; Score 58; DB 2; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.035;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 PAYRPPNAPI 12
 Db 1 PAYRPPNAPI 10

RESULT 18
 US-09-239-043D-1441
 ; Sequence 1441, Application US/09239043D
 ; Patent No. 6689363
 ; GENERAL INFORMATION:
 ; APPLICANT: Sette, Alessandro
 ; APPLICANT: Sidney, John
 ; APPLICANT: Southwood, Scott
 ; APPLICANT: Vitello, Maria A.
 ; APPLICANT: Livingston, Brian D.
 ; APPLICANT: Celis, Esteban
 ; APPLICANT: Kubo, Ralph T.
 ; APPLICANT: Grey, Howard M.
 ; APPLICANT: Chesnut, Robert
 ; APPLICANT: Epimmune Inc.
 ; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
 ; FILE REFERENCE: 2060.0060007
 ; CURRENT APPLICATION NUMBER: US/09/239,043D
 ; CURRENT FILING DATE: 1999-01-27
 ; PRIOR APPLICATION NUMBER: US 09/189,702
 ; PRIOR FILING DATE: 1998-11-10
 ; PRIOR APPLICATION NUMBER: US 08/978,291
 ; PRIOR FILING DATE: 1997-11-25
 ; PRIOR APPLICATION NUMBER: US 08/820,360
 ; PRIOR FILING DATE: 1997-03-12
 ; PRIOR APPLICATION NUMBER: US 60/013,363
 ; PRIOR FILING DATE: 1996-03-13
 ; PRIOR APPLICATION NUMBER: US 08/461,603
 ; PRIOR FILING DATE: 1995-06-05
 ; PRIOR APPLICATION NUMBER: US 08/347,610
 ; PRIOR FILING DATE: 1994-12-01
 ; PRIOR APPLICATION NUMBER: US 08/344,824
 ; PRIOR FILING DATE: 1994-11-23
 ; PRIOR APPLICATION NUMBER: US 08/278,634
 ; PRIOR FILING DATE: 1994-07-21
 ; PRIOR APPLICATION NUMBER: US 08/205,713
 ; PRIOR FILING DATE: 1994-03-04
 ; PRIOR APPLICATION NUMBER: US 08/197,484
 ; PRIOR FILING DATE: 1994-02-16
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 2579
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 1441
 ; LENGTH: 10
 ; TYPE: PRT
 ; ORGANISM: Orthohepadnaviridae hepatitis B virus
 US-09-239-043D-1441
 Query Match 78.4%; Score 58; DB 2; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.035;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 3 PAYRPPNAPI 12
 Db 1 PAYRPPNAPI 10

RESULT 19
 US-08-159-339A-402
 ; Sequence 402, Application US/08159339A
 ; Patent No. 6037135
 ; GENERAL INFORMATION:
 ; APPLICANT: Kubo, Ralph T.
 ; APPLICANT: Grey, Howard M.
 ; APPLICANT: Sette, Alessandro
 ; APPLICANT: Celis, Esteban
 ; TITLE OF INVENTION: HLA Binding peptides and Their
 ; TITLE OF INVENTION: Uses
 ; NUMBER OF SEQUENCES: 1254
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Townsend and Townsend and Crew LLP
 ; STREET: Two Embarcadero Center, Eighth Floor
 ; CITY: San Francisco
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94111-3834
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FastSeq for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/159,339A
 ; FILING DATE: 29-NOV-1993
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/926,666
 ; FILING DATE: 07-AUG-1992
 ; APPLICATION NUMBER: US 08/027,746
 ; FILING DATE: 05-MAR-1993
 ; APPLICATION NUMBER: US 08/103,396
 ; FILING DATE: 06-AUG-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Weber, Ellen Lauver
 ; REGISTRATION NUMBER: 32,762
 ; REFERENCE/DOCKET NUMBER: 018623-005030US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 576-0200
 ; TELEFAX: (415) 576-0300
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 402:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 10 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 US-08-159-339A-402

Query Match 74.3%; Score 55; DB 2; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.09;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 AYRPPNAPIL 13
 Db 1 AYRPPNAPIL 10

RESULT 20
 US-09-239-043D-673
 ; Sequence 673, Application US/09239043D
 ; Patent No. 6689363
 ; GENERAL INFORMATION:

```
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitiello, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Cells, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0060007
; CURRENT APPLICATION NUMBER: US/09/239,043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189,702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978,291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820,360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013,363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461,603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344,824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278,634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197,484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 2579
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 673
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
US-09-239-043D-673 ..
```

```
Query Match          74.3%; Score 55; DB 2; Length 10;
Best Local Similarity 100.0%; Pred.No. 0.09;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      4 AYRPPNAPIL 13
Db      1 AYRPPNAPIL 10
```

```
Search completed: April 19, 2006, 19:33:25
Job time : 47 secs
```

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: April 19, 2006, 19:24:25 ; Search time 185 seconds
(without alignments)
30.875 Million cell updates/sec

Title: US-09-277-064-9

Perfect score: 74

Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 659747

Minimum DB seq length: 0

Maximum DB seq length: 13

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 75 summaries

Database :

- A_Geneseq_21.*
- 1: Geneseqp1980s.*
- 2: Geneseqp1990s.*
- 3: Geneseqp2000s.*
- 4: Geneseqp2001s.*
- 5: Geneseqp2002s.*
- 6: Geneseqp2003as.*
- 7: Geneseqp2003bs.*
- 8: Geneseqp2004s.*
- 9: Geneseqp2005s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	74	100.0	13	2 AAR33501	Aar33501 T helper
2	74	100.0	13	2 AAR78929	Aar78929 Hbc 128-1
3	74	100.0	13	2 AAW39439	Aaw39439 Mouse H-2
4	74	100.0	13	2 AAW50117	Aaw50117 Pan DR bi
5	74	100.0	13	3 AAY52556	Aay52556 HBV core
6	74	100.0	13	4 AAG64542	Aag64542 T-helper
7	74	100.0	13	4 AAE02681	Aae02681 Hepatitis
8	74	100.0	13	4 AAE00471	Aae00471 Hepatitis
9	74	100.0	13	4 AAG62426	Aag62426 Immunogen
10	74	100.0	13	4 AAB82775	Aab82775 Hepatitis
11	74	100.0	13	4 AAU00614	Aau00614 H-2 I-Ab-
12	74	100.0	13	5 AAU70851	Aau70851 Hepatitis
13	74	100.0	13	5 ABB76787	Abb76787 HBV pepti
14	74	100.0	13	5 ABG62860	Abg62860 Antigenic
15	74	100.0	13	5 ABP52344	Abp52344 TH epitop
16	74	100.0	13	5 ABP52307	Abp52307 T helper
17	74	100.0	13	5 ABP52350	Abp52350 TH epitop
18	74	100.0	13	5 ABP51503	Abp51503 T helper
19	74	100.0	13	6 ABR44095	Abr44095 HBV core
20	74	100.0	13	6 ABP98778	Abp98778 HBV core
21	74	100.0	13	6 ARO22990	Aro22990 p128-40 I
22	74	100.0	13	6 ABU63009	Abu63009 HBV core
23	74	100.0	13	7 ADC21494	Adc21494 Hepatitis
24	74	100.0	13	7 ADC85105	Adc85105 HBV assoc

25	74	100.0	13	7 ADD35647	Add35647 Hepatitis
26	74	100.0	13	7 ADG38596	Adg38596 Hepatitis
27	74	100.0	13	7 ADI64650	Adi64650 HBV core
28	74	100.0	13	8 ADK14662	Adk14662 Hepatitis
29	74	100.0	13	8 ADM73996	Adm73996 Specifici
30	74	100.0	13	8 ADN12176	Adn12176 Amino aci
31	74	100.0	13	8 ADU08528	Adu08528 HBVC pept
32	74	100.0	13	8 ADU08528	Adu08528 HBVC pept
33	74	100.0	13	9 ADW99595	Adw99595 HBV core-
34	69	93.2	12	1 AAP80957	Aap80957 T cell st
35	69	93.2	12	7 ADW36758	Adw36758 HLA bindi
36	69	93.2	12	8 ADP73617	Adp73617 Hepatitis
37	69	93.2	13	6 ADA51351	Ada51351 Hepatitis
38	65	87.8	11	5 ABJ06979	Abj06979 Hepatitis
39	65	87.8	11	5 ABJ07803	Abj07803 Hepatitis
40	65	87.8	11	8 ADK38259	Adk38259 Hepatitis
41	65	87.8	11	8 ADK38798	Adk38798 Hepatitis
42	65	87.8	11	9 ADZ05649	Adz05649 Hepatitis
43	65	87.8	11	9 ADZ06188	Adz06188 Hepatitis
44	65	87.8	12	6 ADA51350	Ada51350 Hepatitis
45	65	87.8	13	6 ADA51364	Ada51364 Hepatitis
46	64	86.5	12	6 ADA51337	Ada51337 Hepatitis
47	64	86.5	13	6 ADA51338	Ada51338 Hepatitis
48	62	83.8	11	5 ABJ07363	Abj07363 Hepatitis
49	62	83.8	11	5 ABJ06223	Abj06223 Hepatitis
50	62	83.8	11	8 ADK37524	Adk37524 Hepatitis
51	62	83.8	11	8 ADK38574	Adk38574 Hepatitis
52	62	83.8	11	9 ADZ04914	Adz04914 Hepatitis
53	62	83.8	11	9 ADZ05964	Adz05964 Hepatitis
54	61	82.4	11	6 ADA51349	Ada51349 Hepatitis
55	61	82.4	12	6 ADA51363	Ada51363 Hepatitis
56	61	82.4	13	6 ADA51377	Ada51377 Hepatitis
57	60	81.1	11	6 ADA51336	Ada51336 Hepatitis
58	59	79.7	10	2 AAY47999	Aay47999 Immunogen
59	59	79.7	10	5 ABJ07000	Abj07000 Hepatitis
60	59	79.7	10	5 ABJ07724	Abj07724 Hepatitis
61	59	79.7	10	8 ADK38280	Adk38280 Hepatitis
62	59	79.7	10	9 ADZ05670	Adz05670 Hepatitis
63	59	79.7	11	5 ABJ06294	Abj06294 Hepatitis
64	59	79.7	11	5 ABJ08210	Abj08210 Hepatitis
65	59	79.7	11	5 ABJ07371	Abj07371 Hepatitis
66	59	79.7	11	8 ADK37586	Adk37586 Hepatitis
67	59	79.7	11	9 ADZ04976	Adz04976 Hepatitis
68	58	78.4	10	5 ABJ06222	Abj06222 Hepatitis
69	58	78.4	10	5 ABJ07307	Abj07307 Hepatitis
70	58	78.4	10	8 ADK37523	Adk37523 Hepatitis
71	58	78.4	10	8 ADK38573	Adk38573 Hepatitis
72	58	78.4	10	9 ADZ04913	Adz04913 Hepatitis
73	58	78.4	10	9 ADZ05963	Adz05963 Hepatitis
74	56	75.7	10	6 ADA51335	Ada51335 Hepatitis
75	55	74.3	9	8 ADQ12329	Adq12329 Hepatitis

ALIGNMENTS

RESULT 1

AAR33501 standard; peptide; 13 AA.

AC AAR33501;

AC AAR33501;

DT 25-MAR-2003 (revised)

DT 01-JUL-1993 (first entry)

XX T helper peptide Hbc 128-140.

DE Hepatitis B virus; HBV; core antigen; MHC class I; chronic; acute;

XX infection; identification; HLA-restricted.

XX Synthetic.

OS Synthetic.

XX Synthetic.

PN WO9303764-A1.

XX 04-MAR-1993.
 PD 26-AUG-1992; 92WO-US007218.
 PF 26-AUG-1991; 91US-00749568.
 PR 29-JAN-1992; 92US-00827682.
 PR 27-APR-1992; 92US-00874491.
 XX (CYTE-) CYTEL CORP.
 XX Vitello MA, Chesnut RW;
 XX WPI; 1993-093728/11.
 XX Cytotoxic T-lymphocyte stimulating peptide(s) - derived from hepatitis B
 PT virus useful for treating, preventing and diagnosing infection.
 PT
 XX Disclosure; Page 21; 89pp; English.
 XX This is a T helper epitope peptide, the sequence of which is derived from
 CC hepatitis B virus (HBV) core antigen amino acids 128-140. It may be used
 CC in a conjugate with cytotoxic T-lymphocyte stimulating (CTL) peptides to
 CC enhance an individual's immunity by providing cell-mediated immunity and
 CC protective antibodies. (Updated on 25-MAR-2003 to correct PN field.)
 XX Sequence 13 AA;
 SQ Query Match 100.0%; Score 74; DB 2; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 TPPAYRPPNAPIL 13
 DB |||||
 1 TPPAYRPPNAPIL 13
 RESULT 3
 AAW39439
 ID AAW39439 standard; peptide; 13 AA.
 XX
 AC AAW39439;
 XX
 DT 11-JUN-1998 (first entry)
 XX Mouse H-2 I-Ab-restricted HBV core antigen-derived T helper epitope.
 XX T cell epitope; immune response; human leukocyte antigen; HLA Class I;
 KW vaccine; immunogenic; major histocompatibility complex; MHC; B cell;
 KW disease; anti-tumour; anti-viral.
 XX Synthetic.
 OS Mus sp.
 OS WO9741440-A1.
 PN 06-NOV-1997.
 XX 28-APR-1997; 97WO-NL000229.
 PF 26-APR-1996; 96EP-00201145.
 PR 23-DEC-1996; 96EP-00203670.
 XX (UYLE-) RIJKSUNIV LEIDEN.
 PA (SCIS-) SCI SEED CAPITAL INVESTMENTS BV.
 PA Van Der Burg SH, Kast WM, Toes RM, Offringa R, Melief CJM;
 PI WPI; 1997-549891/50.
 XX
 DR Method of selecting T cell peptide epitope(s) - by measuring the
 XX stability of HLA class I-peptide complexes on intact B cells.
 PT
 XX Example 2; Page 21; 109pp; English.
 PS
 XX Peptides AAW39430-W39734 are used in a novel method for the selection of
 CC immunogenic T-cell peptide epitopes present in polypeptide antigens.
 CC Peptide AAW39439 is a mouse H-2 I-Ab-restricted HBV core antigen-derived
 CC T helper epitope which is injected into HLA-A*0201Kb transgenic mice. The
 CC method involves the identification of peptide sequences capable of
 CC binding to an HLA (human leukocyte antigen) class I molecule and
 CC measuring the binding of this epitope peptide to the HLA class I peptide.
 CC The stability of binding of the peptide and MHC (major histocompatibility
 CC complex) class I molecule is measured on intact human B cells carrying
 CC the MHC molecule at their cell surfaces. The method can be used to select
 CC peptide epitopes for generating vaccines against a disease associated
 CC with the polypeptide, e.g. cancers or AIDS. The peptide epitopes are
 CC especially T-cell peptide epitopes with strong anti-tumour and anti-viral
 CC immune responses
 XX Sequence 13 AA;
 SQ Query Match 100.0%; Score 74; DB 2; Length 13;
 AAW78929
 ID AAW78929 standard; peptide; 13 AA.
 XX
 AC AAW78929;
 XX
 DT 25-MAR-2003 (revised)
 DT 27-MAR-1996 (first entry)
 XX HBC 128-140 cytotoxic T lymphocyte epitope.
 XX HBC 128-140; cytotoxic T; CTL; epitope; helper T; HTL; cell; lymphocyte;
 KW antigens; treatment; disease prevention; hepatitis B.
 KW Hepatitis B virus.
 OS WO9522317-A1.
 XX 24-AUG-1995.
 PD 16-FEB-1995; 95WO-US002121.
 PF 16-FEB-1994; 94US-00197484.
 XX (CYTE-) CYTEL CORP.
 XX Vitello MA, Chesnut RW, Sette AD, Celis E, Grey H;
 PI WPI; 1995-302545/39.
 XX Compn. inducing cytotoxic T lymphocyte response to pref. viral,
 PT bacterial, parasitic or tumour antigens - useful in the treatment and
 PT prevention of diseases associated with the antigen e.g. hepatitis B.
 XX Example 4; Page 52; 109pp; English.

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Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13
DB 1 TPPAYRPPNPAPIL 13

RESULT 4
AAW50117
ID AAW50117 standard; peptide; 13 AA.
XX
AC AAW50117;
XX
XX 30-JUN-1998 (first entry)
XX
DE Pan DR binding peptide (14).
XX
XX Pan DR binding peptide; antigen binding site; MHC molecule; DR locus.
XX
XX Synthetic.
XX
XX US5736142-A.
XX
XX 07-APR-1998.
XX
XX 14-SRP-1994; 94US-00305871.
XX
XX 14-SEP-1993; 93US-00121101.
XX
XX (CYTE-) CYTEL CORP.
XX
XX Sidney J, Sette A, Alexander JL, Gaeta F, Grey HM;
XX WPI; 1998-239154/21.
XX
XX Peptides that bind to MHC molecules of all DR alleles - inhibiting or
XX inducing MHC Class II mediated activation of T cells.
XX
XX Example 5; Col 35-36; 29pp; English.
XX
XX The present sequence, a pan DR binding peptide, is capable of binding
XX antigen binding sites on MHC molecules, which are encoded by most of the
XX alleles of a DR locus. The peptide can be used to inhibit or induce MHC
XX Class II mediated activation of T-cells or helper T-cells, which
XX themselves mediate a CTL response. The peptide can be used in mammals,
XX especially humans, to inhibit T-cell-mediated events involved in
XX allograft rejection, allergic responses and autoimmunity and as a vaccine
XX adjuvant for enhancing an immune response against an administered
XX immunogen. The peptide can be used with other immunogens to treat, e.g.
XX prostate cancer, hepatitis B, hepatitis C, AIDS, renal and cervical
XX carcinoma, lymphoma, CMV and condyloma acuminatum
XX
XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 2; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13
DB 1 TPPAYRPPNPAPIL 13

RESULT 5
AA52556
ID AA52556 standard; peptide; 13 AA.
XX
AC AA52556;
XX
XX 06-AUG-2003 (revised)
XX 28-FEB-2000 (first entry)
XX

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DE HBV core antigen MHC class II epitope, encoded by I80T fusion gene.
XX
XX Chimeric; pan DR epitope; expression vector; promoter;
XX major histocompatibility complex; MHC; targeting; peptide; epitope;
XX antigen; presentation; class I; cytosolic pathway; endoplasmic reticulum;
XX class II; extracellular antigen; endocytic pathway; helper T lymphocyte;
XX HTL; universal epitope; cytotoxic T lymphocyte; CTL; immune response;
XX immunogenicity; assay; vaccine; immunity; infection; pathogen; virus;
XX HIV; HBV; HCV; hepatitis B; hepatitis C; bacterium; protozoan;
XX tumour cell; autoimmune disease; activation; antiviral; antimalarial;
XX immunoprotective; core antigen.
XX
XX Synthetic.
XX Hepatitis B virus.
XX
XX WO958658-A2.
XX
XX 18-NOV-1999.
XX
XX 13-MAY-1999; 99WO-US010646.
XX
XX 13-MAY-1998; 98US-00078904.
XX
XX 15-MAY-1998; 98US-0085751P.
XX
XX (EPIM-) EPIMUNE INC.
XX
XX Fikes JD, Hermanson GG, Sette A, Ishioka GY, Livingston B;
XX Chesnut RW;
XX
XX WPI; 2000-039103/03.
XX
XX Expression vectors encoding major histocompatibility targeting sequence,
XX used as, e.g. tumor vaccines.
XX
XX Example 1; Page 36; 130pp; English.
XX
XX This sequence represents a hepatitis B virus (HBV) core antigen MHC class
XX II epitope, encoded by the I80T fusion gene (AA238617), used in an
XX exemplification of the present invention. The invention relates to a
XX novel expression vector comprising a promoter operably linked to a fusion
XX gene encoding a major histocompatibility complex (MHC) targeting
XX sequence, and two or more heterologous peptide epitopes. The MHC
XX targeting sequence may be a class I targeting sequence, which directs
XX an MHC class I epitope to a cytosolic pathway or to the endoplasmic
XX reticulum, or an MHC class II targeting sequence, which directs
XX extracellular antigens to enter the endocytic pathway to be processed
XX into antigen peptides for presentation on MHC class II molecules. The
XX heterologous epitopes may comprise either helper T lymphocyte (HTL)
XX epitopes, or a cytotoxic T lymphocyte (CTL) epitope and a universal HTL
XX epitope such as a pan DR epitope (PADRE). The vectors are useful for
XX stimulating an immune response in vivo, as well as for use in assaying
XX the human immunogenicity of a human T cell peptide epitope in vivo in a
XX non-human mammal. They provide a nucleic acid vaccine for enhancing
XX immunity against infectious pathogens, such as viruses (e.g., HIV,
XX hepatitis B (HBV) and hepatitis C (HCV)), bacteria, protozoa (e.g.,
XX Plasmodium falciparum, the cause of malaria) and also tumour cells and
XX autoimmune diseases. Universal MHC class II epitopes are advantageously
XX combined with other MHC class I and class II epitopes to increase the
XX number of cells that are activated in response to a given antigen and
XX provide a broader population coverage of MHC-reactive alleles. (Updated
XX on 06-AUG-2003 to correct OS field.)
XX
XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13
DB 1 TPPAYRPPNPAPIL 13

```

RESULT 6
AAG64542
ID AAG64542 standard; peptide; 13 AA.

XX AC AAG64542;

XX DT 22-OCT-2001 (first entry)

XX DE T-helper epitope peptide.

XX KW Cytotoxic T cell lymphocyte; CTL; anti-HIV; viral disease; HIV;

XX KW human immunodeficiency virus; vaccine; T-helper.

XX OS Synthetic.

XX PN WO200155177-A2.

XX PD 02-AUG-2001.

XX PF 29-JAN-2001; 2001WO-DK000059.

XX PR 28-JAN-2000; 2000EP-00610017.

XX PR 31-JAN-2000; 2000US-0179333P.

XX PA (STAT-) STATENS SERUM INST.

XX PI Fomsgaard A, Brunak S, Buus S, Corbet S, Lauemoller SL, Hansen J;

XX DR WPI; 2001-476184/51.

XX PT The generation of cytotoxic T cell lymphocytes epitopes for use in anti-

XX PT HIV vaccines.

XX PS Example 7; Page 42; 383pp; English.

XX CC The invention relates to identification of cytotoxic T cell lymphocyte

XX CC (CTL) epitopes (AAM22116-AAM23484) that generate anti-HIV activity. CTL

XX CC are a major protective mechanism against viral diseases. Antibodies may

XX CC neutralise extracellular human immunodeficiency virus (HIV) and limit or

XX CC prevent infection of cells in the host, but CTL will limit viral

XX CC production by killing the cell. The CTL epitopes are useful in medicine,

XX CC in the manufacture of vaccines or diagnostic agents. The present sequence

XX CC is that of a T-helper epitope peptide useful to the invention

XX SQ Sequence 13 AA;

QY 1 TPPAYRPPNPAPIL 13

DB 1 TPPAYRPPNPAPIL 13

RESULT 7
AAE02681
ID AAE02681 standard; peptide; 13 AA.

XX AC AAE02681;

XX DT 06-AUG-2001 (first entry)

XX DE Hepatitis B virus HBVc helper peptide.

XX KW Cytostatic; antibacterial; antifungal; gene therapy; vaccine; antiviral;

XX KW tumour; epitope; glycoprotein; hepatitis B virus; HBV; immune response;

XX KW CTL; cytotoxic T lymphocyte; HLA; human leucocyte antigen.

XX OS Hepatitis B virus.

XX PN WO200127291-A1.

PD 19-APR-2001.

XX PF 29-SEP-2000; 2000WO-EP009902.

XX PR 12-OCT-1999; 99US-0158356P.

XX PA (INSP) INST PASTEUR.

XX PI Firat H, Lemonnier F, Langlade-Demoyen P;

XX DR WPI; 2001-282038/29.

XX PT New polynucleotide comprising at least one viral, fungal, bacterial, or

XX PT tumor epitope of an antigen, capable of inducing a cellular response.

XX PS Example 1; Page 23; 70pp; English.

XX CC The invention relates to polynucleotide containing at least a part of the

XX CC coding sequence of the middle glycoprotein of hepatitis B virus (HBV) in

XX CC which is inserted a DNA sequence coding for an epitope comprising at

XX CC least one viral, fungal, bacterial, or tumour epitope of an antigen,

XX CC capable of inducing a cellular response. Nucleic acids and compositions

XX CC of the invention are useful for inducing in vivo a CTL (cytotoxic T

XX CC lymphocyte) response against several epitopes of one or more, bacterial,

XX CC viral, fungal, or tumour antigens. A composition of the invention

XX CC produces an immune response against HIV antigen and are used in the

XX CC production of vaccines. The polynucleotides of the invention are also

XX CC used in gene therapy. The present sequence is hepatitis B virus helper

XX CC peptide. This peptide is co-injected with human epitopes in order to

XX CC elicit HLA (human leucocyte antigen) -A2.1-restricted CTL response in

XX CC mice

XX SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.0017;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13

DB 1 TPPAYRPPNPAPIL 13

RESULT 8

AAE00471

ID AAE00471 standard; peptide; 13 AA.

XX AC AAE00471;

XX DT 19-JUN-2001 (first entry)

XX DE Hepatitis B virus core (HBVc) tumour epitopic peptide.

XX KW Tumour epitope; cytostatic; immunostimulant; gene therapy;

XX KW middle glycoprotein; Hepatitis B virus core; cytotoxic response;

XX KW immune response; cytotoxic T lymphocyte; CTL; HBVc; HLA;

XX KW human leucocyte antigen.

XX OS Hepatitis B virus.

XX PN WO200123577-A2.

XX PD 05-APR-2001.

XX PF 29-SEP-2000; 2000WO-EP009900.

XX PR 30-SEP-1999; 99US-0156945P.

XX PA (INSP) INST PASTEUR.

XX PI Firat H, Lemonnier F, Langlade-Demoyen P, Michel M, Suhrbier AA;

XX DR WPI; 2001-266164/27.

XX Novel polynucleotide having DNA sequence encoding tumor antigen epitope
 PT inserted in part of coding sequence of middle glycoprotein of hepatitis B
 PT virus, used to induce immune response against tumor-specific antigen.

XX Example 1; Page 13; 36pp; English.

XX The present invention relates to an isolated or purified polynucleotide
 CC containing a DNA sequence coding for at least one tumour epitope of a
 CC tumour antigen inserted into part of the coding sequence of the middle
 CC glycoprotein of the Hepatitis B virus (HBV). The polynucleotide is useful
 CC for optionally evaluating cytotoxic responses in the individual's
 CC lymphocyte population. It induces an immune response against at least one
 CC tumour specific antigen or tissue specific antigen. The vector comprising
 CC the polynucleotide induces in vivo, cellular and/or humoral immune
 CC response. The composition comprising the polynucleotide induces in vivo,
 CC cytotoxic T lymphocyte (CTL) against one or more antigens or epitopes
 CC present on the hybrid protein. The polynucleotide is also useful in gene
 CC therapy. The present sequence is a Hepatitis B virus core (HBVC) tumour
 CC epitopic peptide. This peptide elicits HLA (human leucocyte antigen)-A2.1
 CC - restricted CTL response in mice

XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 |||||
 Db 1 TPPAYRPPNAPIL 13

RESULT 9

ID AAG62426 standard; peptide; 13 AA.

XX AAG62426;

DT 03-SEP-2001 (first entry)

DE Immunogenic peptide HBV core SEQ ID 30.

XX Class I epitope; immunogenic; heteroclitic analogue; immune response;
 KW antigen display; viral disease; cancer.

XX Synthetic.

XX WO200136452-A2.

XX 25-MAY-2001.

XX 20-NOV-2000; 2000WO-US031856.

XX 18-NOV-1999; 99US-0166529P.

PR 06-OCT-2000; 2000US-0239008P.

XX (EPIM-) EPIMUNE INC.

XX Tangri S, Sette A, Ishioka G;

XX WPI; 2001-355609/37.

XX Enhancing immunogenicity of peptide containing class I epitope, useful
 PT for treating cancer, comprises providing (semi-)conservative amino acid
 PT substitutions at specified positions of these epitopes.

XX Disclosure; Fig 1A; 96pp; English.

XX This invention relates to a method of enhancing the immunogenicity of a
 CC peptide, where the peptide contains a class I epitope. The invention
 CC includes methods for preparing peptides containing epitopes which have
 CC enhanced ability to effect an immune response (compared to wild-type

CC epitopes). The peptides are referred to as heteroclitic analogues. The
 CC method is useful for eliciting an immune response by contacting CTLs with
 CC the immunogenically enhanced peptide in vitro in the presence of an
 CC antigen presenting cell, or by administering to a subject a nucleic acid
 CC molecule comprising a nucleotide sequence encoding the peptide. The
 CC peptides are useful as reagents to evaluate an immune response and the
 CC efficacy of the vaccine, and for making antibodies. The heteroclitic
 CC analogues are useful in immunological compositions for the treatment of
 CC viral diseases, cancer, and other conditions which are characterised by
 CC displayed antigens on target cells. The present sequence represents a
 CC class I epitope which may be used in the method of the invention

XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 |||||
 Db 1 TPPAYRPPNAPIL 13

RESULT 10

ID AAB82775 standard; protein; 13 AA.

XX AAB82775;

DT 06-AUG-2003 (revised)

DT 29-OCT-2001 (first entry)

XX Hepatitis B core antigen peptide.

XX Telomerase reverse transcriptase; hTERT; human; cytotoxic T lymphocyte;
 KW major histocompatibility complex; cancer; tumour;
 KW human leucocyte antigen; HLA-A2.1; HBVC; vaccine.

XX Hepatitis B virus.

XX WO200160391-A1.

XX 23-AUG-2001.

XX 15-FEB-2001; 2001WO-US005143.

XX 15-FEB-2000; 2000US-0182685P.

PR 15-FEB-2001; 2001US-00182685.

XX (REGC) UNIV CALIFORNIA.

XX Zanetti M;

XX WPI; 2001-536552/59.

XX Vaccine for initiating and enhancing a cytotoxic T lymphocyte response,
 PT for treating cancers or tumors or for inducing immune response against
 PT tumors, comprises a telomerase reverse transcriptase peptide.

XX Example 1; Page 12; 52pp; English.

XX The present sequence is that of a hepatitis B virus core antigen (HBVC)
 CC peptide comprising amino acid residues 128-140. The peptide was used to
 CC immunise HHD mice and results were compared with those obtained using
 CC human telomerase reverse transcriptase (hTERT) HLA-A2.1+ restricted
 CC peptide p540 (see AAB82772). The induction of CTL responses in vitro and
 CC in vivo, and the susceptibility to lysis of tumour cells of various
 CC origins by hTERT CTL suggest that hTERT could serve as a universal cancer
 CC vaccine for humans. A claimed universal vaccine for treating tumours of
 CC any origin comprises at least 1 hTERT peptide. The peptide is 7-15 amino
 CC acid residues in length and may be modified to enhance binding to the
 CC major histocompatibility complex. Also claimed is a method for inducing
 CC and enhancing a CTL response against cancer cells, involving harvesting

CC blood leucocytes, pulsing with hprt, and contacting cancer cells with the
 CC pulsed leucocytes. A method for targeting CTL to tumour cells is also
 CC claimed, and involves administering a hprt peptide to a mammal, OS
 CC especially a cancer patient. (Updated on 06-AUG-2003 to correct OS
 CC field.)

XX
 XX Sequence 13 AA;
 SQ
 Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 TPPAYRPPNAPIL 13
 |||||
 DB 1 TPPAYRPPNAPIL 13
 |||||

RESULT 11
 AAU00614
 ID AAU00614 standard; peptide; 13 AA.
 XX
 AC AAU00614;
 XX
 DT 12-SEP-2001 (first entry)
 XX
 DE H-2 I-Ab-restricted HBV core antigen-derived T helper epitope.
 XX
 KW Human; MUC1; antigenic peptide; major histocompatibility complex; MHC-I;
 KW glycoprotein; cytotoxic T lymphocytes; T cell response; cancer; vaccine;
 KW cancer gene therapy; diagnosis; treatment; inflammatory disorder; HBV;
 KW organ transplant rejection; graft versus host disease.
 XX
 OS Hepatitis B virus.
 XX
 PN WO200118035-A2.
 XX
 PD 15-MAR-2001.
 XX
 PF 07-SEP-2000; 2000WO-EP008761.
 XX
 PR 08-SEP-1999; 95GB-00021242.
 PR 10-SEP-1999; 99EP-00402237.
 PR 03-MAR-2000; 2000US-0187215P.
 XX
 PA (TRGE) TRANSGENE SA
 PA (IMCR) IMPERIAL CANCER RES TECHNOLOGY LTD.
 XX
 PI Taylor-Papadimitriou J, Heukamp LC, Offringa R, Melief CJM;
 PI Acres B, Thomas M;
 XX
 WPI; 2001-235187/24.

XX
 PT New antigenic polypeptides of MUC-1 protein which activate cytotoxic T
 PT lymphocyte proteins and their analogs, useful for identifying a major
 PT histocompatibility complex class I restricted T cell response and for
 PT diagnosing cancer.
 XX
 PS Example 5; Page 42; 81pp; English.
 XX
 CC The sequence represents an H-2 I-Ab-restricted hepatitis B virus (HBV)
 CC core antigen-derived T helper epitope used in testing of human MUC1
 CC polypeptide derivatives through a cytotoxic T lymphocyte (CTL) assay.
 CC Derivative antigenic peptides of MUC1 protein bind at least one major
 CC histocompatibility complex class I (MHC-I) glycoprotein, which activates
 CC cytotoxic T lymphocytes to induce a protective response against tumours.
 CC Diagnosis of cancer involves determining the presence or absence in a
 CC host cell of MHC class I restricted T cell response to a MUC1 derivative,
 CC where the presence of the MHC class I restricted T cell response
 CC indicates that the host has cancer. Measurement of the level of MHC class
 CC I restricted T cell response is also useful to monitor the severity of
 CC cancer, a larger response indicating a more severe cancer. MUC1
 CC derivatives are useful in cancer therapy and to follow MUC1 specific
 CC immune responses in patients during the course of disease and/or

CC treatment. MUC1 DNA is useful in cancer gene therapy, vaccination and
 CC diagnosis. Compositions of the sequences are used in vaccines and
 CC treatments against cancer or diseases caused by an immune response, such
 CC as an inflammatory disorder, organ transplant rejection or graft versus
 CC host disease

XX
 XX Sequence 13 AA;
 SQ
 Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 TPPAYRPPNAPIL 13
 |||||
 DB 1 TPPAYRPPNAPIL 13
 |||||

RESULT 12
 AAU70851
 ID AAU70851 standard; peptide; 13 AA.
 XX
 AC AAU70851;
 XX
 DT 14-FEB-2002 (first entry)
 XX
 DE Hepatitis B virus antigen binding partner #83.
 XX
 KW Hepatitis B virus; virucide; immunomodulator; hepatotropic; HBV;
 KW antiinflammatory; HBV core antigen; HBcAg; HBV E antigen; HBeAg;
 KW B cell mediated processing; T cell proliferation; cytokine production;
 KW immune system response.
 XX
 OS Synthetic.
 XX
 PN WO200181421-A2.
 XX
 PD 01-NOV-2001.
 XX
 PF 20-APR-2001; 2001WO-IB000844.
 XX
 PR 21-APR-2000; 2000US-00556605.
 XX
 PA (TRIP-) TRIPEP AB.
 XX
 PI Sallberg M;
 XX
 WPI; 2002-055347/07.

XX Novel peptide that binds to hepatitis B virus core or E antigen, useful
 XX for treating and preventing hepatitis B virus infection.
 XX
 PS Example 6; Page 28; 82pp; English.
 XX
 CC The invention relates to an isolated or purified peptide (I) which binds
 CC Hepatitis B virus (HBV) core antigen (HBcAg) or HBV E antigen (HBeAg).
 CC (I) is useful for treating or preventing Hepatitis B virus (HBV)
 CC infection, by identifying a subject in need of a molecule that inhibits
 CC HBV infection, and providing the subject with (I). (I) is also useful for
 CC determining the presence of HBV in a biological sample, and for
 CC inhibiting B cell mediated processing and uptake of HBcAg and/or HBeAg,
 CC by determining whether (I) inhibits B cell mediated processing and uptake
 CC of HBcAg and/or HBeAg by performing an assay of T cell proliferation or
 CC cytokine production. (I) is also useful for modulating an immune system
 CC response. (I) is useful as a template for a design of synthetic molecules
 CC including peptides, derivatives or modified peptides, peptidomimetics and
 CC chemicals. (I) is also useful as biotechnological tool, diagnostic
 CC reagent and as active ingredient in pharmaceuticals. (I) is also useful
 CC as detection reagents in conventional immunohistochemical techniques, as
 CC diagnostic reagents to detect HBV in biological sample, and to determine
 CC the efficacy of an HBV treatment protocol by monitoring the levels of
 CC HBcAg and/or HBeAg during and after treatment. AAU70766-AAU70876
 CC represent Hepatitis B virus (HBV) core antigen (HBcAg) or HBV E antigen
 CC (HBeAg) binding partners as described in the invention

```

xx SQ Sequence 13 AA;
    Query Match      100.0%; Score 74; DB 5; Length 13;
    Best Local Similarity 100.0%; Pred. No. 0.0017;
    Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
   |||||
Db 1 TPPAYRPPNPAPIL 13

RESULT 13
ABB76787
ID ABB76787 standard; peptide; 13 AA.
XX AC ABB76787;
XX DT 31-MAY-2002 (first entry)
XX DE HBV peptide 128-140.
XX KW Antiviral; anti-HIV; cytostatic; epitope; HLA A2.1;
XX KW human leukocyte antigen; immunotherapy; cancer; viral infection; vaccine.
XX OS Unidentified.
XX PN FR2812087-A1.
XX PD 25-JAN-2002.
XX PF 21-JUL-2000; 2000FR-00009591.
XX PR 21-JUL-2000; 2000FR-00009591.
XX FA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.
XX PI Kosmatopoulos K, Tourdot S, Scardino A, Gross DA;
XX WPI; 2002-189846/25.
XX DR
XX PT Identifying subdominant or cryptic epitopes, useful in immunotherapy of
XX PT cancer and viral infection, comprises testing modified, non-immunogenic
XX PT peptides for induction of cytotoxic T cells.
XX PS Example 1; Page 14; 62pp; French.
XX CC The present invention relates to subdominant/cryptic epitopes that are
XX CC presented by HLA (human leukocyte antigen) Class I molecule A2.1. The
XX CC epitopes or chimeric polypeptides containing them and nucleic acid
XX CC encoding them are useful for preventative or curative immunotherapy of
XX CC cancer and viral infections, particularly where used as vaccines. The
XX CC present peptide was used to illustrate the invention

xx SQ Sequence 13 AA;
    Query Match      100.0%; Score 74; DB 5; Length 13;
    Best Local Similarity 100.0%; Pred. No. 0.0017;
    Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
   |||||
Db 1 TPPAYRPPNPAPIL 13

RESULT 14
ABG62860
ID ABG62860 standard; peptide; 13 AA.
XX AC ABG62860;
XX DT 21-AUG-2002 (first entry)
XX PD

DE Antigenic domain peptide from a Hepatitis B virus protein.
XX
KW Ligand/receptor specificity exchanger; antibody; pathogen receptor;
KW bacterial infection; viral infection; yeast infection; cancer;
KW parasitic infection; fungal infection; proliferation; antibacterial;
KW virucide; cytostatic; antifungal; antigenic domain.
XX
XX Hepatitis B virus.
XX OS
XX PN WO200224887-A2.
XX PD 28-MAR-2002.
XX PF 19-SEP-2001; 2001WO-IB002327.
XX PR 19-SEP-2000; 2000US-00664025.
XX FA (TRIP-) TRIPEP AB.
XX PI Sallberg M, Flock J;
XX WPI; 2002-489707/52.
XX DR
XX PT Novel ligand/receptor specificity exchanger that redirects antibodies to
XX PT receptors on pathogen or tumor cell, has specificity domain having ligand
XX PT for receptor, and antigenic domain having epitope of pathogen or toxin.
XX PS Claim 14; Page 14; 79pp; English.
XX CC The present invention relates to ligand/receptor specificity exchangers
XX CC comprising at least one specificity domain comprising a ligand for a
XX CC receptor, and at least one antigenic domain joined to the specificity
XX CC domain, where the antigenic domain comprises an epitope of a pathogen or
XX CC toxin. The ligand/receptor specificity exchangers redirect antibodies to
XX CC receptors present on pathogens. They are useful for preventing and
XX CC treating human diseases such as bacterial, viral, yeast, parasitic and
XX CC fungal infections, and cancer. These compositions act by inhibiting
XX CC proliferation of pathogens, or cancer cells. One of the prophylactic
XX CC applications of the ligand/receptor specificity exchangers includes
XX CC coating or crosslinking it to a medical device or implant which include
XX CC implantable medical devices that tend to serve as foci for infection by a
XX CC number of bacterial species. ABG62853-ABG62869 represent antigenic domain
XX CC peptides used in the methods of the present invention

SQ Sequence 13 AA;
    Query Match      100.0%; Score 74; DB 5; Length 13;
    Best Local Similarity 100.0%; Pred. No. 0.0017;
    Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
   |||||
Db 1 TPPAYRPPNPAPIL 13

RESULT 15
ABP52344
ID ABP52344 standard; peptide; 13 AA.
XX AC -ABP52344;
XX DT 17-OCT-2002 (first entry)
XX DE TH epitope.
XX KW Cytotoxic T lymphocyte; CTL; T helper; MAGE3; cytotoxic T cell response;
XX KW tumour; immune response; cancer; vaccine; antibody.
XX OS Synthetic.
XX PN WO200258728-A2.
XX PD 01-AUG-2002.

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XX 28-JAN-2002; 2002WO-GB000354.
 XX PF
 XX PR
 XX 26-JAN-2001; 2001GB-00002145.
 XX PA
 XX (SCAN-) SCANCELL LTD.
 XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
 XX Durrant LG, Parsons T, Robins A;
 XX WPI; 2002-608418/65.
 XX PS
 XX Example 11; Page 45; 87pp; English.
 XX The present invention describes the use of a polypeptide (I) in the
 CC manufacture of a medicament for stimulating a cytotoxic T cell response,
 CC where (I) comprises a first portion comprising the part of human FC that
 CC binds to CD64 and a second portion comprising one or more heterologous T
 CC cell epitopes. Also described is a method of stimulating a cytotoxic T
 CC cell response in a patient such as a mammal, preferably human, by
 CC administering (I) to the patient. (I) has cytostatic activity and can be
 CC used in vaccine production. (I) and the nucleic acid encoding (I) are
 CC useful in the manufacture of a medicament for stimulating cytotoxic T
 CC cell response. The medicament is useful for preventing and/or treating
 CC cancer, e.g. colorectal, lung, breast, gastric or ovarian cancer. The
 CC medicament stimulates cytotoxic and helper T cell responses. The
 CC antibodies are useful as vaccines to stimulate helper and cytotoxic T
 CC cell responses. The polypeptides and nucleic acids are useful in
 CC optimising immunisation schedules for enhancing a protective immune
 CC response against cancer. The present sequence represents a TH epitope
 CC which is used in an example from the present invention
 XX SQ Sequence 13 AA;
 Query Match 100.0%; Score 74; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 TPPAYRPPNAPIL 13
 DB 1 TPPAYRPPNAPIL 13
 RESULT 16
 ABP52307
 ID ABP52307 standard; peptide; 13 AA.
 XX AC ABP52307;
 XX 17-OCT-2002 (first entry)
 XX T helper epitope.
 XX Cytotoxic T lymphocyte; CTL; T helper; MAGE3; cytotoxic T cell response;
 XX tumour; immune response; cancer; vaccine.
 XX Homo sapiens.
 XX Synthetic.
 XX WO200258728-A2.
 XX 01-AUG-2002.
 XX 28-JAN-2002; 2002WO-GB000354.
 XX (SCAN-) SCANCELL LTD.
 XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
 XX Durrant LG, Parsons T, Robins A;
 XX WPI; 2002-608418/65.
 XX PA Use of polypeptides and nucleic acids encoding the polypeptides, in
 manufacturing medicament for stimulating a cytotoxic T cell response and
 for preventing or treating cancer, e.g. colorectal, lung, breast or
 ovarian cancer.

PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
 XX Durrant LG, Parsons T, Robins A;
 XX WPI; 2002-608418/65.
 XX Use of polypeptides and nucleic acids encoding the polypeptides, in
 manufacturing medicament for stimulating a cytotoxic T cell response and
 for preventing or treating cancer, e.g. colorectal, lung, breast or
 ovarian cancer.
 XX Example 11; Page 32; 87pp; English.
 XX The present invention describes the use of a polypeptide (I) in the
 CC manufacture of a medicament for stimulating a cytotoxic T cell response,
 CC where (I) comprises a first portion comprising the part of human FC that
 CC binds to CD64 and a second portion comprising one or more heterologous T
 CC cell epitopes. Also described is a method of stimulating a cytotoxic T
 CC cell response in a patient such as a mammal, preferably human, by
 CC administering (I) to the patient. (I) has cytostatic activity and can be
 CC used in vaccine production. (I) and the nucleic acid encoding (I) are
 CC useful in the manufacture of a medicament for stimulating cytotoxic T
 CC cell response. The medicament is useful for preventing and/or treating
 CC cancer, e.g. colorectal, lung, breast, gastric or ovarian cancer. The
 CC medicament stimulates cytotoxic and helper T cell responses. The
 CC antibodies are useful as vaccines to stimulate helper and cytotoxic T
 CC cell responses. The polypeptides and nucleic acids are useful in
 CC optimising immunisation schedules for enhancing a protective immune
 CC response against cancer. The present sequence represents a T helper
 CC epitope which is used in an example from the present invention
 XX SQ Sequence 13 AA;
 Query Match 100.0%; Score 74; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 TPPAYRPPNAPIL 13
 DB 1 TPPAYRPPNAPIL 13
 RESULT 17
 ABP52350
 ID ABP52350 standard; peptide; 13 AA.
 XX AC ABP52350;
 XX 17-OCT-2002 (first entry)
 XX TH epitope.
 XX Cytotoxic T lymphocyte; CTL; T helper; MAGE3; cytotoxic T cell response;
 XX tumour; immune response; cancer; vaccine; antibody.
 XX Synthetic.
 XX WO200258728-A2.
 XX 01-AUG-2002.
 XX 28-JAN-2002; 2002WO-GB000354.
 XX 26-JAN-2001; 2001GB-00002145.
 XX (SCAN-) SCANCELL LTD.
 XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
 XX Durrant LG, Parsons T, Robins A;
 XX WPI; 2002-608418/65.
 XX PA Use of polypeptides and nucleic acids encoding the polypeptides, in

PT manufacturing medicament for stimulating a cytotoxic T cell response and
 PT for preventing or treating cancer, e.g. colorectal, lung, breast or
 PT ovarian cancer.

XX Example 11; Page 46; 87pp; English.

CC The present invention describes the use of a polypeptide (I) in the
 CC manufacture of a medicament for stimulating a cytotoxic T cell response,
 CC where (I) comprises a first portion comprising the part of human Fc that
 CC binds to CD64 and a second portion comprising one or more heterologous T
 CC cell epitopes. Also described is a method of stimulating a cytotoxic T
 CC cell response in a patient such as a mammal, preferably human, by
 CC administering (I) to the patient. (I) has cytostatic activity and can be
 CC used in vaccine production. (I) and the nucleic acid encoding (I) are
 CC useful in the manufacture of a medicament for stimulating cytotoxic T
 CC cell response. The medicament is useful for preventing and/or treating
 CC cancer, e.g. colorectal, lung, breast, gastric or ovarian cancer. The
 CC medicament stimulates cytotoxic and helper T cell responses. The
 CC antibodies are useful as vaccines to stimulate helper and cytotoxic T
 CC cell responses. The polypeptides and nucleic acids are useful in
 CC optimising immunisation schedules for enhancing a protective immune
 CC response against cancer. The present sequence represents a TH epitope
 CC which is used in an example from the present invention

XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13
 |||||
 DB 1 TPPAYRPPNPAPIL 13

RESULT 18
 ABP51503
 ID ABP51503 standard; peptide; 13 AA.

AC ABP51503;

DT 11-SEP-2002 (first entry)

XX T helper epitope HBC 128-140 peptide 875.23.

XX Hepatitis B virus; HBV; antigen; major histocompatibility complex; MHC;
 KW cytotoxic T cell; helper T cell; virucide; hepatotropic; immunogenic;
 KW cytotoxic T lymphocyte; CTL; HLA-restricted response.

OS Synthetic.

PN US6322789-B1.

PD 27-NOV-2001.

PF 05-JUN-1995; 95US-00464496.

PR 26-AUG-1991; 91US-00749568.

PR 29-JAN-1992; 92US-00827682.

PR 27-APR-1992; 92US-00874491.

PR 26-AUG-1992; 92US-00935811.

XX (EPIM-) EPIMMUNE INC.

XX Vitiello MA, Chesnut RW;

XX WPI; 2002-497942/53.

XX Immunogenic compositions for protecting against hepatitis B virus
 PT infection.

XX Example 4; Col 13; 49pp; English.

CC The invention relates to a novel immunogenic composition comprising a
 CC peptide that binds to a Major Histocompatibility Complex (MHC) class I
 CC molecule to form a complex recognised by a cytotoxic T cell, and a second
 CC peptide that binds to an MHC class II molecule to form a complex
 CC recognised by a helper T cell (a group in the first peptide comprises a
 CC hepatitis B virus group). The composition of the invention has virucide
 CC and hepatotropic activity. The cytotoxic T lymphocyte (CTL)-stimulating
 CC peptides induce HLA-restricted responses to hepatitis B virus (HBV)
 CC antigens. The peptides, derived from CTL group regions of both HBV
 CC surface and nucleocapsid antigens, are particularly useful in the
 CC treatment and prevention of HBV infection, including the treatment of
 CC chronically infected HBV carriers. The peptides are also useful in
 CC diagnostic methods, such as predicting which HBV-infected individuals are
 CC prone to developing chronic infection. The sequences shown in ABP51485-
 CC ABP559 are peptides used for the production of the immunogenic
 CC composition of the invention

XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13
 |||||
 DB 1 TPPAYRPPNPAPIL 13

RESULT 19
 ABR44095
 ID ABR44095 standard; peptide; 13 AA.

AC ABR44095;

DT 04-AUG-2003 (first entry)

XX HBV core peptide fragment (residues 128-140).

DE HIV-1; immunogenic; anti-HIV; anti-tumour; HBV; helper peptide.

KW Hepatitis b virus.

OS WO2003029285-A2.

PN 10-APR-2003.

PD 27-SEP-2002; 2002WO-IB004576.

PR 28-SEP-2001; 2001CA-02357906.

XX (INSP) INST PASTEUR.

XX (INRM) INSERM INST NAT SANTE & RECH MEDICALE.

XX Cardinaud S, Habel A, Langlade-Demoyen P, Lemonnier P;

XX WPI; 2003-457225/43.

XX Novel purified immunogenic peptide derived from HIV-1 antigen, for
 PT preventing and/or treating HIV-1 infections, for priming human CD8 cells
 PT in vitro, or for detecting early cytotoxic T lymphocyte response against
 PT HIV-1.

XX Example 1; Page 14; 51pp; English.

CC The invention relates to purified immunogenic peptide derived from a
 CC human immunodeficiency virus 1 (HIV-1) antigen. The immunogenic peptide,
 CC encoding polynucleotide and specific antibodies are useful for priming
 CC human CD8 cells in vitro. The peptide is useful in a diagnostic method
 CC for detecting an early CTL response against HIV-1, by providing a
 CC tetrameric complex comprising the peptide, incubating the complex with
 CC peripheral blood lymphocytes of the subject, and determining the presence
 CC of HIV-1 specific CTL. The peptide and polynucleotide are useful for
 CC stimulating ex vivo a human immune response against HIV-1. A

CC pharmaceutical composition comprising the peptide or its functional
CC derivatives useful as an anti-HIV agent or for the preparation of an
CC anti-HIV vaccine. The peptide and encoding polynucleotide are useful for
CC preventing and/or treating HIV-1 infections, or for producing specific
CC antibodies. They are also useful as an anti-tumoural agent. The present
CC sequence represents a HBV core peptide fragment used as a helper peptide
XX
SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13
| | | | | | | | | | | | |
DB 1 TPPAYRPPNPAPIL 13

RESULT 20
ABP98778
ID ABP98778 standard; peptide; 13 AA.
XX
AC ABP98778;

DT 27-JUN-2003 (first entry)

DE HBV core antigen corresponding to amino acids 128-140.

XX HU antigen; immunostimulant; cytostatic; nontropic; vaccine; human;
KW neuroprotective; peptide therapy; cell therapy; immunogen; nucleoprotein;
KW small-cell lung cancer; neuroblastoma; sarcoma; vaccine.

OS Hepatitis B virus.

XX CA2387391-A1.

PD 08-NOV-2002.

PF 08-MAY-2002; 2002CA-02387391.

PR 08-MAY-2001; 2001CA-02344769.

PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.

PA (INSP) INST PASTEUR.

PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

PI Bourguin-Plonguet A, Langlade-Demoyen P, Gherardi RK, Farcet J;

PI Garcia-Pons F;

DR WPI; 2003-314131/31.

PT New purified immunogenic Hu antigen peptide for use in a vaccine to
PT induce an immune response against a cancerous cell in a subject, for
PT treating e.g. autologous or syngenic small-cell lung cancer or a nervous
PT system disease.

PS Disclosure; Page 13; 52pp; English.

XX The invention relates to new purified immunogenic peptides derived from
CC the Hu antigen, a family of nucleoprotein of size 35-40 kD. The sequence
CC is used to generate a number of peptides comprising fragments of the Hu
CC antigen. The peptides are used to induce an immune response against a
CC cancerous cell, especially small-cell lung cancer, neuroblastomas,
CC sarcoma or prostate carcinoma. The immune response is an in vitro, ex
CC vivo and/or in vivo CD8 T-lymphocytes (CTL) response. The administration
CC of the peptides to an HLA-A2.1 human induces the activation of a specific
CC CTL response against autologous or syngenic small-cell lung cancer
CC (SCLC). The sequences can be used as an antitumoral vaccine, for the
CC treatment or prevention of HLA-A2.1 human SCLC and/or nervous system
CC damage diseases. An animal model is used for selecting therapeutic
CC molecules capable of inducing an immune response in vivo against the
CC peptides. The peptides induce an immune response against a cancerous cell
CC without inducing an immune response against non-cancerous cells of a

CC mammal, preferably a human. The peptides are shown in records ABP98764-
CC ABP98776. This sequence corresponds to a fragment of the hepatitis B
CC virus core protein comprising amino acids 128-140. The peptide is used as
CC a control in MHC binding and stabilisation assays
XX
SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0017;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNPAPIL 13
| | | | | | | | | | | | |
DB 1 TPPAYRPPNPAPIL 13

Search completed: April 19, 2006, 19:27:53
Job time : 189 secs

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OM protein - protein search, using sw model

Run on: April 19, 2006, 19:28:11 ; Search time 38 Seconds
(without alignments)
32.916 Million cell updates/sec

Title: US-09-277-064-9

Perfect score: 74
Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 1828

Minimum DB seq length: 0
Maximum DB seq length: 13

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 75 summaries

Database : PIR 80:.*
1: pirl:.*
2: pirl:.*
3: pirl:.*
4: pirl:.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	29	39.2	11	1 XA181H	bradykinin-potenti
2	29	39.2	12	2 S71380	lebetin 1 isoform
3	29	38.2	13	2 S03716	2S albumin large c
4	29	39.2	13	2 S21152	tryptophyllin-rela
5	24	32.4	13	2 G37266	Ig heavy chain C r
6	23	31.1	9	2 S65433	bradykinin - horn
7	23	31.1	9	2 A43065	hydroxyproline-3-b
8	23	31.1	9	2 B60246	ornitho-kinin - ch
9	23	31.1	9	2 A26744	bradykinin-like pe
10	23	31.1	9	2 A61057	Thr-6 bradykinin -
11	23	31.1	9	2 A60579	bradykinin-like pe
12	23	31.1	9	2 A61363	bradykinin - commo
13	23	31.1	9	2 A61358	bradykinin-like pe
14	23	31.1	11	2 S13279	Ile-Ser-bradykinin
15	23	31.1	11	2 B26744	megascollakinin -
16	23	31.1	11	2 A61365	phyllokinin - Rohd
17	23	31.1	12	2 A61360	vespakinin M - hor
18	23	31.1	12	2 A61359	vespakinin X - hor
19	23	31.1	13	2 A61361	bradykinin-like pe
20	22	29.7	10	2 S39030	lysyl-bradykinin -
21	22	29.7	11	2 I33098	173K exoantigen -
22	22	29.7	12	2 B39690	neural cell adhesi
23	22	29.7	12	2 PNO046	ATP synthase D cha
24	22	29.7	13	2 D39690	neural cell adhesi
25	22	29.7	13	2 A05174	tryptophyllin-13 -
26	21	28.4	7	2 A61081	tryptophyllin, bas
27	21	28.4	10	2 S26506	collagen alpha 1(V
28	20	27.0	8	2 B39745	endoglycosylcerami
29	20	27.0	9	2 S63491	dissimilatory sulf

30	20	27.0	9	2 PLO139	carbon-monoxide de
31	20	27.0	10	2 A36454	trypsin-modulating
32	20	27.0	12	2 S57570	T cell receptor V-
33	20	27.0	12	2 PNO663	dystrophin-associa
34	20	27.0	12	2 PNO930	T-cell receptor be
35	20	27.0	13	2 S63492	dissimilatory sulf
36	19	25.7	9	2 S66419	tetrameric protein
37	19	25.7	9	2 D58503	translation elonga
38	19	25.7	9	2 B30572	T-cell receptor be
39	19	25.7	10	2 C30572	T-cell receptor be
40	19	25.7	10	2 C35389	urease (EC 3.5.1.5
41	19	25.7	10	2 H37196	bradykinin-potenti
42	19	25.7	11	2 PTO301	Ig heavy chain CRD
43	19	25.7	11	2 PQ0231	beta-glucosidase (
44	19	25.7	12	1 JTG0	tremerogen A-10 -
45	19	25.7	12	2 JU0356	cycloleoneurin -
46	19	25.7	12	2 E44787	callimipamide 1 -
47	18	24.3	10	2 S18396	probable glucose-6
48	18	24.3	12	2 PH1567	cerebrin 28 - huma
49	18	24.3	12	4 JX0315	aminotransferase c
50	18	24.3	13	4 I70076	glycophorin B/glyc
51	17	23.0	7	4 A58725	vitrotoxin - destro
52	17	23.0	8	2 PTO311	Ig heavy chain CRD
53	17	23.0	9	2 A61364	isotocin - common
54	17	23.0	9	2 PTO268	Ig heavy chain CRD
55	17	23.0	10	2 PH0926	T-cell receptor be
56	17	23.0	10	2 B33710	ornithine decarbox
57	17	23.0	11	1 XASNBA	bradykinin-potenti
58	17	23.0	11	2 A34135	DNA-binding protei
59	17	23.0	11	2 C37196	bradykinin-potenti
60	17	23.0	11	2 D37196	bradykinin-potenti
61	17	23.0	11	2 S07203	uperolein - frog (
62	17	23.0	11	4 I54081	retinoic acid rece
63	17	23.0	12	2 S11286	exo-alpha-sialidas
64	17	23.0	12	2 S01122	photosystem II 3.7
65	17	23.0	12	2 PA0037	plactocyanin 2 - A
66	17	23.0	12	2 A53524	ubiquinol-cytochro
67	17	23.0	13	2 S01119	photosystem II pro
68	16	21.6	8	2 I57018	gene Cfr protein
69	16	21.6	9	2 S66607	quinoline 2-oxidor
70	16	21.6	9	2 PTO247	Ig heavy chain CRD
71	16	21.6	9	4 S15595	orf 2 rara 5'-resi
72	16	21.6	10	2 C39111	Ig heavy chain C r
73	16	21.6	10	2 I48778	small nuclear ribo
74	16	21.6	10	2 PQ0788	NADH2 dehydrogenas
75	16	21.6	11	2 C61497	seed protein ws-18

ALIGNMENTS

RESULT 1

XAVIBH

bradykinin-potentiating peptide - halys viper

N:Alternate names: BPP

C:Species: Agkistrodon halys (halys viper)

C>Date: 30-Sep-1988 #sequence_revision 30-Sep-1988 #text_change 09-Jul-2004

C:Accession: J00002

R:Chi, C.W.; Wang, S.Z.; Xu, L.G.; Wang, M.Y.; Lo, S.S.; Huang, W.D.

Peptides 6, 339-342, 1985

A:Title: Structure-function studies on the bradykinin potentiating peptide from Chinese

A:Reference number: J00002; MUID:86177022; PMID:3008123

A:Accession: J00002

A:Molecule type: protein

A:Residues: 1-11 <CHI>

A:Cross-references: UNIPROT:P04562; UNIPARC:UPI0000126A96

C:Comment: Because this peptide both inhibits the activity of the angiotensin-converti

C:Superfamily: bradykinin-potentiating peptide

C:Keywords: angiotensin-converting enzyme inhibitor; antihypertensive; bradykinin; py

F:1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental

Query Match 39.2%; Score 29; DB 1; Length 11;
Best Local Similarity 71.4%; Pred. No. 1.2e+02;

```
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 RPNAPI 12
   |||||
Db 3 RPPGPI 9

RESULT 2
S71380
lebetin 1 isoform beta - Vipera lebetina
C:Species: Vipera lebetina
C>Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 09-Jul-2004
C:Accession: S71380
R:Barbouche, R.; Marrakchi, N.; Mansuelle, P.; Krifi, M.; Fenouillet, E.; Rochat, H.; El
FEBS Lett. 392, 6-10, 1996
A:Title: Novel anti-platelet aggregation polypeptides from Vipera lebetina venom: isolat
A:Reference number: S71379; MUID:96354866; PMID:8769304
A:Accession: S71380
A:Molecule type: protein
A:Residues: 1-12 <BAR>
A:Cross-references: UNIPROT:Q7LZ10; UNIPARC:UPI0000030730
A:Experimental source: venom
C:Keywords: anticoagulant; venom

Query Match 39.2%; Score 29; DB 2; Length 12;
Best Local Similarity 62.5%; Pred. No. 1.3e+02;
Matches 5; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 PPAYRPPN 9
   |||||
Db 4 PPKKGGPN 11

RESULT 3
S09716
2S albumin large chain (1 and 2) nII - rape (fragments)
A:Alternate names: 2S albumin large chain nIII
C:Species: Brassica napus (rape)
C>Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 21-Aug-1998
C:Accession: S09716; S09718; S09717
R:Monsalve, R.I.; Mendez-Arias, L.; Lopez-Otin, C.; Rodriguez, R.
FEBS Lett. 263, 209-212, 1990
A:Title: beta-Turns as structural motifs for the proteolytic processing of seed proteins
A:Reference number: S09720; MUID:90242974; PMID:2185951
A:Accession: S09716
A:Molecule type: protein
A:Residues: 1-9;10-13 <MON>
A:Cross-references: UNIPARC:UPI000017B01F; UNIPARC:UPI000017B020
A:Experimental source: seed
A:Note: 3-Ser was also found
A:Accession: S09718
A:Molecule type: protein
A:Residues: 1-9;10-13 <MO2>
A:Cross-references: UNIPARC:UPI000017B01F; UNIPARC:UPI000017B020
A:Experimental source: seed
A:Accession: S09717
A:Molecule type: protein
A:Residues: 1-9;10-13 <MO3>
A:Cross-references: UNIPARC:UPI000017B01F; UNIPARC:UPI000017B020
A:Experimental source: seed

Query Match 39.2%; Score 29; DB 2; Length 13;
Best Local Similarity 55.6%; Pred. No. 1.4e+02;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3 PPAYRPPNAP 11
   |||||
Db 4 PQRPPPGP 12

RESULT 4
S21152
tryptophyllin-related peptide - two-colored leaf frog
```

```
C:Species: Phyllomedusa bicolor (two-colored leaf frog)
C>Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 16-Aug-2004
C:Accession: S21152
R:Mignogna, G.; Severini, C.; Simmaco, M.; Negri, L.; Falconieri Erspamer, G.; Kreil,
FEBS Lett. 302, 151-154, 1992
A:Title: Identification and characterization of two dermorphins from skin extracts of
A:Reference number: S21152; MUID:92339502; PMID:1633846
A:Accession: S21152
A:Molecule type: protein
A:Residues: 1-13 <MIG>
A:Cross-references: UNIPROT:Q7LZ51; UNIPARC:UPI0000017A4F6
A:Experimental source: skin

Query Match 39.2%; Score 29; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.4e+02;
Matches 5; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 3 PPAYRPPNAPI 12
   |||||
Db 4 PFYPPPIYVP 13

RESULT 5
G37266
Ig heavy chain C region (PY2) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C>Date: 19-Mar-1997 #sequence_revision 13-Mar-1998 #text_change 13-Mar-1998
C:Accession: G37266
R:Ruff-Jamison, S.; Campos-Gonzalez, R.; Glenney Jr., J.R.
J. Biol. Chem. 266, 6607-6613, 1991
A:Title: Heavy and light chain variable region sequences and antibody properties of ar
A:Reference number: A38740; MUID:91177923; PMID:1706720
A:Accession: G37266
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-13 <RUF>
A:Cross-references: UNIPARC:UPI0000017C6CE

Query Match 32.4%; Score 24; DB 2; Length 13;
Best Local Similarity 57.1%; Pred. No. 7.8e+02;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 TPPAYRP 7
   |||
Db 4 TPPSQYP 10

RESULT 6
S65433
bradykinin - horn fly (fragment)
C:Species: Haematobia irritans (horn fly)
C>Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 13-Mar-1997
C:Accession: S65433
R:Wijffels, G.; Fitzgerald, C.; Gough, J.; Riding, G.; Elvin, C.; Kemp, D.; Willadsen,
Eur. J. Biochem. 237, 414-423, 1996
A:Title: Cloning and characterisation of angiotensin-converting enzyme from the dipter
A:Reference number: S65431; MUID:96215437; PMID:8647080
A:Accession: S65433
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <WIJ>
A:Cross-references: UNIPARC:UPI000002CF4A
A:Note: the source is designated as Haematobia irritans exigu

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
   |||
Db 2 PPGFSP 7
```

```
RESULT 7
A43065
hydroxyproline-3-bradykinin - frog (Heleophryne purcellii)
C:Species: Heleophryne purcellii
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A43065
R:Nakajima, T.; Yasuhara, T.; Erspamer, G.F.; Visser, J.
Experientia 35, 1133, 1979
A:Title: Occurrence of Hyp(3)-bradykinin in methanol extracts of the skin of the South A
A:Reference number: A43065; MUID:80024576; PMID:488255
A:Accession: A43065
A:Molecule type: protein
A:Residues: 1-9 <NA>
A:Cross-references: UNIPROT:Q7LZ17; UNIPARC:UPI000002CF4A
C:Keywords: bradykinin; hydroxyproline; skin
F3/Modified site: hydroxyproline (pro) #status experimental

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PPGFSP 7

RESULT 8
B60246
ornitho-kinin - chicken
C:Species: Gallus gallus (chicken)
C:Date: 11-Dec-1992 #sequence_revision 11-Dec-1992 #text_change 16-Aug-2004
C:Accession: B60246
R:Kimura, M.; Sueyoshi, T.; Morita, T.; Tanaka, K.; Iwanaga, S.
Adv. Exp. Med. Biol. 247A, 359-367, 1989
A:Title: Ornitho-kininogen and ornitho-kinin: isolation, characterization and chemical s
A:Reference number: A60246; MUID:90102072; PMID:2603803
A:Accession: B60246
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <KIM>
A:Cross-references: UNIPROT:Q7LZ50; UNIPARC:UPI000017A4F8

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PPGFSP 7

RESULT 9
A26744
bradykinin-like peptide - garden dagger wasp
N:Alternate names: Thr-6-bradykinin
C:Species: Megascolia flavifrons (garden dagger wasp)
C:Date: 08-Mar-1989 #sequence_revision 08-Mar-1989 #text_change 05-Oct-2004
C:Accession: A26744
R:Yasuhara, T.; Mantel, P.; Nakajima, T.; Piek, T.
Toxicol 25, 527-535, 1987
A:Title: Two kinins isolated from an extract of the venom reservoirs of the solitary wasp
A:Reference number: A94322; MUID:87293024; PMID:3617088
A:Accession: A26744
A:Molecule type: protein
A:Residues: 1-9 <YAS>
A:Cross-references: UNIPARC:UPI000012DF29

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PPGFSP 7

RESULT 10
A61057
Thr-6 bradykinin - scoliid wasp (Colpa interrupta)
C:Species: Colpa interrupta
C:Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 05-Oct-2004
C:Accession: A61057
R:Piek, T.; Hue, B.; Mantel, P.; Nakajima, T.; Pelhate, M.; Yasuhara, T.
Comp. Biochem. Physiol. C 96, 157-162, 1990
A:Title: Threonine(6)-bradykinin in the venom of the wasp Colpa interrupta (F.) presy
A:Reference number: A61057; MUID:91130217; PMID:1980872
A:Accession: A61057
A:Molecule type: protein
A:Residues: 1-9 <PIE>
A:Cross-references: UNIPARC:UPI000012DF29
C:Keywords: bradykinin; presynaptic neurotoxin; venom

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PPGFSP 7

RESULT 11
A60579
bradykinin-like peptide - slider turtle
C:Species: Pseudemys scripta (slider)
C:Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 05-Oct-2004
C:Accession: A60579
R:Conlon, J.M.; Hicks, J.W.; Smith, D.D.
Endocrinology 126, 985-991, 1990
A:Title: Isolation and biological activity of a novel kinin ([Thr(6)]bradykinin) from
A:Reference number: A60579; MUID:90126625; PMID:2298179
A:Accession: A60579
A:Molecule type: protein
A:Residues: 1-9 <CON>
A:Cross-references: UNIPARC:UPI000012DF29
C:Comment: This peptide increases aortic blood flow but, unlike bradykinin in mammals:
C:Keywords: plasma

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PPGFSP 7

RESULT 12
A61363
bradykinin - common frog
C:Species: Rana temporaria (common frog)
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C:Accession: A61363
R:Anastasi, A.; Erspamer, V.; Bertaccini, G.
Comp. Biochem. Physiol. A 14, 43-52, 1965
A:Title: Occurrence of bradykinin in the skin of Rana temporaria.
A:Reference number: A61363
A:Accession: A61363
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <ANA>
A:Cross-references: UNIPROT:Q7LZJ8; UNIPARC:UPI000002CF4A
C:Keywords: skin

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PPGFSP 7
```

Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PGFSP 7

RESULT 13

A61358
bradykinin-like peptide I - Japanese pond frog
C:Species: Rana nigromaculata (Japanese pond frog)
C>Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C:Accession: A61358
R:Nakajima, T.
Chem. Pharm. Bull. 16, 769-770, 1968
A:Title: Occurrence of a new active peptide on smooth muscle and bradykinin in the skin
A:Reference number: A61358; MUID:68412013; PMID:5677638
A:Accession: A61358
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <NAK>
A:Cross-references: UNIPROT:Q7L254; UNIPARC:UPI000017A4F0
C:Keywords: skin

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PGFSP 7

RESULT 14

S13279
Ile-Ser-bradykinin - human (fragment)
N:Alternate names: T-kinin
C:Species: Homo sapiens (man)
C>Date: 02-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C:Accession: S13279
R:Wunderer, G.; Walter, I.; Eschenbacher, B.; Lang, M.; Kellermann, J.; Kindermann, G.
Biol. Chem. Hoppe-Seyler 371, 977-981, 1990
A:Title: Ile-Ser-bradykinin is an aberrant permeability factor in various human malignant
A:Reference number: S13279; MUID:91166748; PMID:2076202
A:Accession: S13279
A:Molecule type: protein
A:Residues: 1-11 <WUN>
A:Cross-references: UNIPROT:Q7M4P1; UNIPARC:UPI0000148EBE
C:Keywords: bradykinin

Query Match 31.1%; Score 23; DB 2; Length 11;
Best Local Similarity 50.0%; Pred. No. 9.1e+02;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 4 PGFSP 9

RESULT 15

B26744
megascollakinin - garden dagger wasp
N:Alternate names: 6-Thr-bradykinin-Lys-Ala
C:Species: Megascollia flavifrons (garden dagger wasp)
C>Date: 08-Mar-1989 #sequence_revision 08-Mar-1989 #text_change 05-Oct-2004
C:Accession: B26744; A28609
R:Yasuhara, T.; Mantel, P.; Nakajima, T.; Piek, T.
Toxicol 25, 527-535, 1987
A:Title: Two kinins isolated from an extract of the venom reservoirs of the solitary wasp
A:Reference number: A94322; MUID:87293024; PMID:3617088
A:Accession: B26744
A:Molecule type: protein
A:Residues: 1-11 <YAS>

A:Cross-references: UNIPROT:P12797; UNIPARC:UPI0000126AD6
R:Nakajima, T.; Piek, T.; Yasuhara, T.; Mantel, P.
Toxicol 26, 34, 1988
A:Title: Two kinins isolated from the venom of Megascollia flavifrons.
A:Reference number: A28609
A:Accession: A28609
A:Molecule type: protein
A:Residues: 1-11 <NAK>
A:Cross-references: UNIPARC:UPI0000126AD6
C:Keywords: bradykinin; presynaptic neurotoxin; venom

Query Match 31.1%; Score 23; DB 2; Length 11;
Best Local Similarity 50.0%; Pred. No. 9.1e+02;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PGFSP 7

RESULT 16

A61365
phyllokinin - Rohde's leaf frog
N:Alternate names: bradykinyl-iso-leucyl-tyrosine O-sulfate
C:Species: Phyllomedusa rohdei (Rohde's leaf frog)
C>Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C:Accession: A61365
R:Anastasi, A.; Bertaccini, G.; Erapamer, V.
Br. J. Pharmacol. 27, 479-485, 1966
A:Title: Pharmacological data on phyllokinin (bradykinyl-iso-leucyl-tyrosine O-sulfate)
A:Reference number: A61365; MUID:67179312; PMID:5970899
A:Accession: A61365
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-11 <ANA>
A:Cross-references: UNIPROT:Q7LZ52; UNIPARC:UPI000017A4F2
C:Keywords: sulfoprotein
F:11/Binding site: sulfate (Tyr) (covalent) #status experimental

Query Match 31.1%; Score 23; DB 2; Length 11;
Best Local Similarity 50.0%; Pred. No. 9.1e+02;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 2 PGFSP 7

RESULT 17

A61360
vespakinin M - hornet (Vespa mandarinia)
C:Species: Vespa mandarinia
C>Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C:Accession: A61360
R:Kishimura, H.; Yasuhara, T.; Yoshida, H.; Nakajima, T.
Chem. Pharm. Bull. 24, 2896-2897, 1976
A:Title: Vespakinin-M, a novel bradykinin analogue containing hydroxyproline, in the
A:Reference number: A61360; MUID:77114342; PMID:1017116
A:Accession: A61360
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-12 <KIS>
A:Cross-references: UNIPROT:Q7M3T3; UNIPARC:UPI000017A4F3
C:Keywords: hydroxyproline; venom
F:4/Modified site: 4-hydroxyproline (Pro) #status experimental

Query Match 31.1%; Score 23; DB 2; Length 12;
Best Local Similarity 50.0%; Pred. No. 1e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
||:|
Db 3 PGFSP 8

Qy 2 PPAYRP 7
||:|
Db 3 PPGWSP 8

Search completed: April 19, 2006, 19:32:33
Job time : 40 secs

RESULT 18
A61359
vespakinin X - hornet (Vespa xanthoptera)
C:Species: Vespa xanthoptera
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C:Accession: A61359
R:Yasuhara, T.; Yoshida, H.; Nakajima, T.
Chem. Pharm. Bull. 25, 936-941, 1977
A:Title: Chemical investigation of the hornet (Vespa xanthoptera Cameron) venom. The str
A:Reference number: A61359; MUID:87187853; PMID:264186
A:Accession: A61359
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-12 <YAS>
A:Cross-references: UNIPROT:Q7M3T2; UNIPARC:UPI000017A4F4
C:Keywords: venom

Query Match 31.1%; Score 23; DB 2; Length 12;
Best Local Similarity 50.0%; Pred. No. 1.e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
||:|
Db 3 PPGFSP 8

RESULT 19
A61361
bradykinin-like peptide - Bombina orientalis
C:Species: Bombina orientalis
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C:Accession: A61361
R:Yasuhara, T.; Hira, M.; Nakajima, T.; Yanaihara, N.; Yanaihara, C.; Hashimoto, T.; Sak
Chem. Pharm. Bull. 21, 1388-1391, 1973
A:Title: Active peptides on smooth muscle in the skin of Bombina orientalis Boulenger an
A:Reference number: A61361; MUID:73256822; PMID:4732297
A:Accession: A61361
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-13 <YAS>
A:Cross-references: UNIPROT:P83060; UNIPARC:UPI000017A4F5
C:Keywords: skin

Query Match 31.1%; Score 23; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
||:|
Db 2 PPGFSP 7

RESULT 20
S39030
lysyl-bradykinin - rainbow trout
C:Species: Oncorhynchus mykiss (rainbow trout)
C:Date: 19-May-1994 #sequence_revision 19-Apr-1996 #text_change 16-Aug-2004
C:Accession: S39030
R:Conlon, J.M.; Olson, K.R.
FEBS Lett. 334, 75-78, 1993
A:Title: Purification of a vasoactive peptide related to lysyl-bradykinin from trout pla
A:Reference number: S39030; MUID:94039817; PMID:8224232
A:Accession: S39030
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-10 <CON>
A:Cross-references: UNIPROT:Q9PRZ1; UNIPARC:UPI0000126AD7

Query Match 29.7%; Score 22; DB 2; Length 10;
Best Local Similarity 50.0%; Pred. No. 1.e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 19:24:59 ; Search time 232 Seconds
(without alignments)
39.534 Million cell updates/sec

Title: US-09-277-064-9

Perfect score: 74

Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 5897

Minimum DB seq length: 0

Maximum DB seq length: 13

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 75 summaries

Database : UniProt 05.80.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	29	39.2	11	1 BPP AGKHP	P04562 agkistrodon
2	29	39.2	12	2 Q7L210 VIPLE	Q7L210 vipera lebe
3	29	39.2	13	2 Q7L251 PHYBI	Q7L251 phyllomedus
4	26	35.1	11	2 Q80W11 9MURI	Q80W11 mus sp. nt-
5	25	33.8	10	2 Q9UE86 HUMAN	Q9UE86 homo sapien
6	24	32.4	7	1 TRPY_PACDA	P83455 pachymedusa
7	23	31.1	8	1 PFK2_PERAM	P82692 periplaneta
8	23	31.1	8	2 Q699J0 BETVU	Q699J0 beta vulgar
9	23	31.1	9	1 BRK1 RANNI	Q71254 rana nigrom
10	23	31.1	9	1 KNL3_BOMVA	P83058 bombina var
11	23	31.1	9	1 KNL3_CYPDO	P83659 cyphononyx
12	23	31.1	9	2 P84497_TRASC	P84497 trachemys s
13	23	31.1	9	2 Q7LZ50_CHICK	Q7LZ50 gallus gall
14	23	31.1	9	2 Q7LZJ8 RANTE	Q7LZJ8 rana tempor
15	23	31.1	9	2 Q7LZ17 HELEOPHYRNE	Q7LZ17 heleoptyrhyne
16	23	31.1	11	1 BRKP_PHYRO	Q7LZ52 phyllomedus
17	23	31.1	11	1 BRK MEGFL	P12797 megascolia
18	23	31.1	11	2 Q7L2U2 HUMAN	Q7L2U2 homo sapien
19	23	31.1	11	2 Q7M4P1 HUMAN	Q7M4P1 homo sapien
20	23	31.1	11	2 Q7L2U0_RAT	Q7L2U0 rattus norv
21	23	31.1	11	2 Q7L2U1_MOUSE	Q7L2U1 mus musculus
22	23	31.1	12	1 GRAR_RANRU	P40754 rana rugosa
23	23	31.1	12	1 VESP_VESNA	Q7M3T3 vespa manda
24	23	31.1	12	1 VESP_VESXA	Q7M3T2 vespa xanth
25	23	31.1	12	2 Q9PSW5_CHICK	Q9PSW5 gallus gall
26	23	31.1	13	1 BRK PARID	P42717 parapolylbia
27	22	29.7	8	2 Q4VS04 MANSE	Q4VS04 manduca sex
28	22	29.7	9	2 Q9UCS8 HUMAN	Q9UCS8 homo sapien
29	22	29.7	9	2 P82429_TOBAC	P82429 nicotiana t
30	22	29.7	9	2 Q9PRJ4_LEPOS	Q9PRJ4 lepisosteus
31	22	29.7	10	1 BRK_ONCMY	Q9PRZ1 oncorhynchu

32	22	29.7	13	1 TV13_PHYRO	P04096 phyllomedus
33	21.5	25.1	12	2 P82441_TOBAC	P82441 nicotiana t
34	21	28.4	10	2 Q7M2N0_BOVIN	Q7M2N0 bos taurus
35	21	28.4	11	2 Q6PK01_HUMAN	Q6PK01 homo sapien
36	21	28.4	11	2 Q9GL48_PIG	Q9GL48 sus scrofa
37	21	28.4	13	1 SODM_ARTDA	P83289 arthrobotry
38	21	28.4	13	2 Q9UDC6_HUMAN	Q9UDC6 homo sapien
39	21	28.4	13	2 Q43174_SOLTU	Q43174 solanum tub
40	21	28.4	13	2 P90442_NPVSL	P90442 spodoptera
41	20	27.0	6	1 OVM_LBDEE	P42985 lepidotars
42	20	27.0	10	1 TMOF_AEDAE	P19425 aedes aegyp
43	20	27.0	10	2 Q8RFF1_PSEFL	Q8RFF1 pseudomonas
44	20	27.0	10	2 Q60HP3_GLABR	Q60HP3 xyrichtys d
45	20	27.0	12	2 O61574_OSTOS	O61574 ostertagia
46	20	27.0	12	2 Q64313_RAT	Q64313 rattus norv
47	20	27.0	12	2 Q80XV4_RATTUS	Q80XV4 rattus sp.
48	20	27.0	13	2 Q67604_SLCV	Q67604 squash leaf
49	19	25.7	9	1 NEUD_CAVFO	P34966 cavia porce
50	19	25.7	9	2 Q7M151_9BACT	Q7M151 unidentified
51	19	25.7	9	2 Q82622_9COCO	Q82622 avian infec
52	19	25.7	10	1 BPP8_BOTIN	P30426 bothrops in
53	19	25.7	10	1 URE3_MORMO	P17339 morgansella
54	19	25.7	10	2 Q7SC70_NEUCR	Q7SC70 neurospora
55	19	25.7	10	2 Q7L2H8_HUMAN	Q7L2H8 homo sapien
56	19	25.7	10	2 Q8CJEO_RAT	Q8CJEO rattus norv
57	19	25.7	10	2 Q90348_9FLAV	Q90348 gb virus c/
58	19	25.7	10	2 Q8JV66_POVJC	Q8JV66 polyomaviru
59	19	25.7	10	2 Q8JV68_POVJC	Q8JV68 polyomaviru
60	19	25.7	10	2 Q8JV70_POVJC	Q8JV70 polyomaviru
61	19	25.7	10	2 Q8JV72_POVJC	Q8JV72 polyomaviru
62	19	25.7	10	2 Q8JV74_POVJC	Q8JV74 polyomaviru
63	19	25.7	10	2 Q8JV76_POVJC	Q8JV76 polyomaviru
64	19	25.7	10	2 Q8JV80_POVJC	Q8JV80 polyomaviru
65	19	25.7	10	2 Q8JV82_POVJC	Q8JV82 polyomaviru
66	19	25.7	10	2 Q9Q0V7_POVJC	Q9Q0V7 polyomaviru
67	19	25.7	10	2 Q9Q0V9_POVJC	Q9Q0V9 polyomaviru
68	19	25.7	10	2 Q9Q0W1_POVJC	Q9Q0W1 polyomaviru
69	19	25.7	10	2 Q9Q0W3_POVJC	Q9Q0W3 polyomaviru
70	19	25.7	10	2 Q9Q0W5_POVJC	Q9Q0W5 polyomaviru
71	19	25.7	10	2 Q9Q0W7_POVJC	Q9Q0W7 polyomaviru
72	19	25.7	10	2 Q9Q0W9_POVJC	Q9Q0W9 polyomaviru
73	19	25.7	10	2 Q9Q0X1_POVJC	Q9Q0X1 polyomaviru
74	19	25.7	10	2 Q9Q0X3_POVJC	Q9Q0X3 polyomaviru
75	19	25.7	10	2 Q9Q0X5_POVJC	Q9Q0X5 polyomaviru

ALIGNMENTS

RESULT 1

BPP AGKHP STANDARD; PRT; 11 AA.
ID P04562, 1987 (Rel. 05, Created)

DT 13-AUG-1987 (Rel. 28, Last sequence update)

DT 01-FEB-1994 (Rel. 44, Last annotation update)

DE Bradykinin-potentiating peptide (Angiotensin-converting enzyme

inhibitor).

OS Agkistrodon halys pallas (Chinese water moccasin) (Gloydius halys

pallas).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroides;

OC Viperidae; Crotalinae; Gloydius.

OX NCBI_TaxID=8714;

[1]

RP PROTEIN SEQUENCE.

RC TISSUE=Venom;

RE MEDLINE=66177032; PubMed=3008123;

RA Chi C.-W., Wang S.-Z., Xu L.-G., Wang M.-Y., Lo S.-S., Huang W.-D.,

"Structure-function studies on the bradykinin potentiating peptide

from Chinese snake venom (Agkistrodon halys pallas).";

RL Peptides 6 Suppl. 3:339-342(1985).

CC -1- FUNCTION: This peptide both inhibits the activity of the

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CC angiotensin-converting enzyme and enhances the action of
CC bradykinin by inhibiting the kinases that inactivate it. It acts
CC as an indirect hypotensive agent.
CC -----
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CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC removed.
CC -----
DR PIR; JC0002; XAVISH.
KW Direct protein sequencing; Hypotensive agent;
KW Pyrrolidone carboxylic acid.
FT MOD RES 1 1 Pyrrolidone carboxylic acid.
SQ SEQUENCE 11 AA; 1112 MW; 30BABF1277686777 CRC64;

Query Match 39.2%; Score 29; DB 1; Length 11;
Best Local Similarity 71.4%; Pred. No. 1.2e+03;
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 RPPNAPI 12
DB 3 RPPGPI 9

RESULT 2
Q7L210_VIPLE PRELIMINARY; PRT; 12 AA.
AC Q7L210;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DE Lebetin 1 isoform beta.
OS Vipera lebetina (Elephant snake) (Leventine viper).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Lepidodactylia; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC Viperidae; Viperinae; Macrovipera.
OX NCBI_TaxID=8709;
RN [1]
RP PROTEIN SEQUENCE.
RX MEDLINE=96354866; PubMed=8769304; DOI=10.1016/0014-5793(96)00774-0;
RA Barbouche R., Marrakchi N., Mansuelle P., Krifi M., Fenouillet E.,
RA Rochat H., El Ayeub M.;
RT "Novel anti-platelet aggregation polypeptides from Vipera lebetina
RT venom: isolation and characterization."
RL FEBS Lett. 392:6-10(1996).
DR PIR; S71380; S71380.
SQ SEQUENCE 12 AA; 1248 MW; 2D3CACD53C733327 CRC64;

Query Match 39.2%; Score 29; DB 2; Length 12;
Best Local Similarity 62.5%; Pred. No. 1.4e+03;
Matches 5; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 PPAYRPPN 9
DB 4 PPKGPPN 11

RESULT 3
Q7L251_PHYBI PRELIMINARY; PRT; 13 AA.
AC Q7L251;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DE Trypophyllin-related peptide.
OS Phyllomedusa bicolor (Two-colored leaf frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hylidae;
OC Phyllomedusinae; Phyllomedusa.
OX NCBI_TaxID=8393;
RN [1]
RP PROTEIN SEQUENCE.

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RX MEDLINE=92339502; PubMed=1633846; DOI=10.1016/0014-5793(92)80427-1;
RA Mignogna G., Severini C., Simmaco M., Negri L.,
RA Falconieri Espamer G., Kreil G., Barra D.;
RT "Identification and characterization of two dermorphins from skin
RT extracts of the Amazonian frog Phyllomedusa bicolor."
RL FEBS Lett. 302:151-154(1992).
DR PIR; S21152; S21152.
SQ SEQUENCE 13 AA; 1575 MW; 094C33A21BC5777B CRC64;

Query Match 39.2%; Score 29; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.5e+03;
Matches 5; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 3 PAYRPPNAPI 12
DB 4 PFYPPPIYPV 13

RESULT 4
Q80W11_9MURI PRELIMINARY; PRT; 11 AA.
AC Q80W11;
DT 01-JUN-2003 (TrEMBLrel. 24, Created)
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DE NT-3 transcript A (Fragment).
GN Name=NT-3;
OS Mus sp.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridae; Murinae; Mus.
OX NCBI_TaxID=10095;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=95040015; PubMed=7952296;
RA Leingartner A., Lindholm D.;
RT "Two promoters direct transcription of the mouse NT-3 gene."
RL Eur. J. Neurosci. 6:1149-1159(1994).
DR EMBL; S75812; AAP31855.1; -; Genomic_DNA.
FT NON TER 11
SQ SEQUENCE 11 AA; 1348 MW; 2280047D0DC5A777 CRC64;

Query Match 35.1%; Score 26; DB 2; Length 11;
Best Local Similarity 44.4%; Pred. No. 3.3e+03;
Matches 4; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 5 YRPPNAPIL 13
DB 2 WQPPSARIM 10

RESULT 5
Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DE Collagen alpha 1(I) chain (Fragment).
GN Name=COL1A1;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=92042176; PubMed=1939261;
RA Hawkins J.R., Superti-Furga A., Steinmann B., Dalglish R.;
RT "A 9-base pair deletion in COL1A1 in a lethal variant of osteogenesis
RT imperfecta."
RL J. Biol. Chem. 266:22370-22374(1991).
DR EMBL; S66556; AAB20361.1; -; Genomic_DNA.

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DR GO: GO:0005584; C:collagen type I; NAS.
 DR GO: GO:0005201; P:extracellular matrix structural constituent; NAS.
 DR GO: GO:0007155; P:cell adhesion; NAS.
 KW Collagen.
 FT NON_TER 1 1
 FT NON_TER 10 10
 SQ SEQUENCE 10 AA; 777 MW; 2D20F6D8676DD867 CRC64;
 Query Match 33.8%; Score 25; DB 2; Length 10;
 Best Local Similarity 80.0%; Pred. No. 4.2e+03;
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 7 PPNAP 11
 DB 2 PPGAP 6
 RESULT 6
 TPFY_PACDA STANDARD; PRT; 7 AA.
 AC P83455;
 DT 28-FEB-2003 (Rel. 41, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 13-SEP-2005 (Rel. 48, Last annotation update)
 DE Tryptophyllin-1 (pdt-1).
 OS Pachymedusa dactinolor (Giant mexican leaf frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Neobatrachia; Hylidae;
 OC Phyllomedusinae; Pachymedusa.
 OX NCBI_TaxID=75988;
 [1]
 RP PROTEIN SEQUENCE, MASS SPECTROMETRY, HYDROXYLATION OF PRO-3, AND
 RP AMIDATION.
 RC TISSUE=Skin secretion;
 RA Chen T.B., Orr D.F., Shaw C.;
 RT "Pachymedusa dactinolor tryptophyllin-1 (pdt-1): structural
 RT characterization, pharmacological activity and cloning of precursor
 RT cDNA";
 RL Submitted (SEP-2002) to Swiss-Prot.
 CC -!- FUNCTION: Myoactive. Has selective relaxing activity on vascular
 CC smooth muscle.
 CC -!- SUBCELLULAR LOCATION: Secreted.
 CC -!- TISSUE SPECIFICITY: Expressed by the skin glands.
 CC -!- MASS SPECTROMETRY: MW=809.2; METHOD=MALDI; RANGE=1-7; NOTE=Ref.1.
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 DR GO: GO:0005576; C:extracellular region; NAS.
 DR GO: GO:0045986; P:negative regulation of smooth muscle contra...; NAS.
 KW Amidation; Amphibian defense peptide; Direct protein sequencing;
 KW Hydroxylation.
 FT MOD_RES 3 3 Hydroxyproline.
 FT MOD_RES 7 7 Proline amide.
 SQ SEQUENCE 7 AA; 794 MW; 7772D37DC7776350 CRC64;
 Query Match 32.4%; Score 24; DB 1; Length 7;
 Best Local Similarity 66.7%; Pred. No. 2.2e+06;
 Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 2 PPAYRP 7
 DB 2 PPAYVP 7
 RESULT 7
 PPK2_PERAM STANDARD; PRT; 8 AA.
 AC P82692;
 DT 16-OCT-2001 (Rel. 40, Created)

DT 16-OCT-2001 (Rel. 40, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Pyrokinin-2 (Pea-PK-2) (FXPRL-amide)
 OS Periplaneta americana (American cockroach).
 OC Eukaryota; Metazoa; Arthropoda; Insecta; Pterygota;
 OC Neoptera; Orthopteroidea; Hexapoda; Blattaria; Blattoidea;
 OC Blattidae; Blattellinae; Periplaneta.
 OX NCBI_TaxID=6978;
 [1]
 RN PROTEIN SEQUENCE, FUNCTION, AND MASS SPECTROMETRY.
 RC TISSUE=Corpora cardiaca;
 RX MEDLINE=97353923; PubMed=9210163; DOI=10.1016/S0196-9781(97)00067-3;
 RA Predel R., Kellner R., Kaufmann R., Penzlin H., Gaede G.;
 RT "Isolation and structural elucidation of two pyrokinins from the
 RT retrocerebral complex of the American cockroach";
 RL Peptides 18:473-478(1997).
 [2]
 RN TISSUE SPECIFICITY.
 RP MEDLINE=2018984; PubMed=10723010;
 RA Predel R., Eckert M.;
 RT "Tagma-specific distribution of FXPRLamides in the nervous system of
 RT the American cockroach";
 RL J. Comp. Neurol. 419:352-363(2000).
 CC -!- FUNCTION: Mediates visceral muscle contractile activity (myotropic
 CC activity).
 CC -!- SUBCELLULAR LOCATION: Secreted.
 CC -!- TISSUE SPECIFICITY: Corpora cardiaca.
 CC -!- MASS SPECTROMETRY: MW=883; METHOD=MALDI; RANGE=1-8; NOTE=Ref.1.
 CC -!- SIMILARITY: Belongs to the pyrokinin family.
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 DR InterPro; IPR001484; Pyrokinin.
 DR PROSITE; PS00539; PYROKININ; FALSE NEG.
 KW Amidation; Direct protein sequencing; Neuropeptide; Pyrokinin.
 FT MOD_RES 8 8 Leucine amide.
 SQ SEQUENCE 8 AA; 884 MW; C834176DD9D77775 CRC64;
 Query Match 31.1%; Score 23; DB 1; Length 8;
 Best Local Similarity 71.4%; Pred. No. 2.2e+06;
 Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 7 PPNAPIL 13
 DB 2 PPFAPRL 8
 RESULT 8
 Q699J0 BETVU PRELIMINARY; PRT; 8 AA.
 ID Q699J0 BETVU PRELIMINARY; PRT; 8 AA.
 AC Q699J0;
 DT 25-OCT-2004 (TrEMBLrel. 28, Created)
 DT 25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
 DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
 DE Aldolase I-epimerase (EC 5.1.3.3) (Fragment).
 GN Name=aep;
 OS Beta vulgaris (Sugar beet).
 OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
 OC Caryophyllales; Amaranthaceae; Beta.
 OX NCBI_TaxID=161934;
 [1]
 RN NUCLEOTIDE SEQUENCE.
 RP Schneider K., Weisshaar B., Borchardt D.C., Salamini P.;
 RA "SNP frequency and allelic haplotype structure of Beta vulgaris
 RT expressed genes";
 RL Mol. Breed. 8:63-74(2001).
 [2]
 RN NUCLEOTIDE SEQUENCE.

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RA Moehring S., Salamini F., Schneider K.;
RT "Multiplexed, linkage group-specific SNP marker sets for rapid genetic
RL mapping and fingerprinting of sugar beet (Beta vulgaris L.).";
RL Submitted (JAN-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY535077; RAT09056.1; -; Genomic DNA.
DR GO; GO:0004034; F:aldose 1-epimerase activity; IEA.
DR GO; GO:0016853; F:isomerase activity; IEA.
KW Isomerase.
FT NON_TER 1 1
FT NON_TER 8 8
SQ SEQUENCE 8 AA; 906 MW; 57E735B457776334 CRC64;

Query Match 31.1%; Score 23; DB 1; Length 8;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 6 RPPAYP 10
DB 2 KPNS 6

RESULT 9
BRK1_RANNI STANDARD; PRT; 9 AA.
AC Q7L254;
DT 05-JUL-2004 (Rel. 44, Created)
DT 05-JUL-2004 (Rel. 44, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Bradykinin-like peptide I.
OS Rana nigromaculata (Japanese pond frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranidae; Rana;
OC Pelophylax.
OX NCBI_TaxID=8409;
RN [1]
RP PROTEIN SEQUENCE.
RC TISSUE=Skin;
RX MEDLINE=68412013; PubMed=5677638;
RA Nakajima T.;
RT "Occurrence of a new active peptide on smooth muscle and bradykinin in
RL the skin of Rana nigromaculata hallowell.";
RL Chem. Pharm. Bull. 16:769-770(1968).
CC -!- FUNCTION: Induces smooth muscle contraction.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the bradykinin family.
CC
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CC
CC PIR; A61358;
DR PIR; A61358;
KW Bradykinin; Direct protein sequencing; Vasoactive; Vasodilator.
SQ SEQUENCE 9 AA; 1017 MW; 3687D771A9C86777 CRC64;

Query Match 31.1%; Score 23; DB 1; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
DB 2 PPGETP 7

RESULT 10
KNL3_BOWVA STANDARD; PRT; 9 AA.
AC P83058;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 13-SEP-2005 (Rel. 48, Last annotation update)
DE [Thr6]bradykinin.

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OS Bombina variegata (Yellow-bellied toad).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Archeobatrachia; Bombinatoridae; Bombina.
OX NCBI_TaxID=8348;
RN [1]
RP PROTEIN SEQUENCE, SUBCELLULAR LOCATION, AND TISSUE SPECIFICITY.
RC TISSUE=Skin secretion;
RX MEDLINE=22217713; PubMed=12230583;
RA Chen T., Orr D.F., Bjournson A.J., McClean S., O'Rourke M., Hirst D.G.,
RA Rao P., Shaw C.;
RT "Novel bradykinins and their precursor cDNAs from European yellow-
RT bellied toad (Bombina variegata) skin.";
RL Eur. J. Biochem. 269:4693-4700(2002).
CC -!- FUNCTION: Produces in vitro relaxation of rat arterial smooth
CC muscle and constriction of intestinal smooth muscle.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Expressed by the skin glands.
CC -!- SIMILARITY: Belongs to the bradykinin family.
CC
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CC
CC Amphibian defense peptide; Bradykinin; Direct protein sequencing;
KW Vasoactive; Vasodilator.
KW Vasoactive; Vasodilator.
SQ SEQUENCE 9 AA; 1074 MW; 3393D771A9C86777 CRC64;

Query Match 31.1%; Score 23; DB 1; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 PPAYRP 7
DB 2 PPGETP 7

RESULT 11
KNL3_CYPDO STANDARD; PRT; 9 AA.
AC P83659;
DT 05-JUL-2004 (Rel. 44, Created)
DT 05-JUL-2004 (Rel. 44, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE [Thr6]bradykinin.
OS Cyphononyx dorsalis (Spider wasp).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Vespoidea;
OC Pompilidae; Cyphononyx.
OX NCBI_TaxID=246266;
RN [1]
RP PROTEIN SEQUENCE, SUBCELLULAR LOCATION, TISSUE SPECIFICITY, AND MASS
RP SPECTROMETRY.
RC TISSUE=Venom;
RX MEDLINE=21203862; PubMed=11306139; DOI=10.1016/S0041-0101(00)00262-2;
RA Kono K., Hisada M., Naoki H., Itagaki Y., Yasuhara T., Juliano M.A.,
RA Juliano L., Palma M.S., Yamane T., Nakajima T.;
RT "Isolation and sequence determination of peptides in the venom of the
RT spider wasp (Cyphononyx dorsalis) guided by matrix-assisted laser
RT desorption/ionization time of flight (MALDI-TOF) mass spectrometry.";
RL Toxicon 39:1257-1260(2001).
CC -!- FUNCTION: Produces in vitro relaxation of rat arterial smooth
CC muscle and constriction of intestinal smooth muscle (By
CC similarity).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Expressed by the venom gland.
CC -!- MASS SPECTROMETRY: MW=1074.58; METHOD=MALDI; RANGE=1-9;
CC NOTE=Ref.1.
CC -!- SIMILARITY: Belongs to the bradykinin family.
CC
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -

```

CC the European Bioinformatics Institute. There are no restrictions on its
 CC use as long as its content is in no way modified and this statement is not
 CC removed.

DR GO; GO:0005615; C:extracellular space; IDA.
 DR GO; GO:0045776; P:negative regulation of blood pressure; ISS.
 DR GO; GO:0045987; P:positive regulation of smooth muscle contractility; ISS.
 KW Bradykinin; Direct protein sequencing; Vasoactive; Vasodilator.
 SQ SEQUENCE 9 AA; 1074 MW; 3393D771A9C86777 CRC64;

Query Match 31.1%; Score 23; DB 1; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 2 PPAYRP 7
 ||:|
 Db 2 PGFTFP 7

RESULT 12

ID P84497 TRASC PRELIMINARY; PRT; 9 AA.
 AC P84497
 DT 10-MAY-2005 (TrEMBLrel. 30, Created)
 DT 10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
 DE [Thr6]bradykinin.
 OS Trachemys scripta (Red-eared slider turtle) (Pseudemys scripta).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Testudines; Cryptodira; Testudinoidea; Emydidae; Trachemys.
 OX NCBI_TaxID=34903;
 RN [1]
 RP PROTEIN SEQUENCE.
 RX PubMed=2298179;
 RA Conlon J.M., Hicks J.W., Smith D.D.;
 RT "Isolation and biological activity of a novel kinin
 RT ([Thr(6)]bradykinin) from the turtle, Pseudemys scripta.";
 RL Endocrinology 126:985-991(1990).
 KW Direct protein sequencing.
 SQ SEQUENCE 9 AA; 1074 MW; 3393D771A9C86777 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 2 PPAYRP 7
 ||:|
 Db 2 PGFTFP 7

RESULT 13

ID Q7LZ50 CHICK PRELIMINARY; PRT; 9 AA.
 AC Q7LZ50
 DT 01-MAR-2004 (TrEMBLrel. 26, Created)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
 DE Ornitho-kinin.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP PROTEIN SEQUENCE.
 RX MEDLINE=90102072; PubMed=2603803;
 RA Kimura M., Sueyoshi T., Morita T., Tanaka K., Iwanaga S.;
 RT "Ornitho-kininogen and ornitho-kinin: isolation, characterization and
 RT chemical structure.";
 RL Adv. Exp. Med. Biol. 247A:359-367(1989).
 DR PIR; B60246; B60246.
 SQ SEQUENCE 9 AA; 1040 MW; 339D3771A9C86777 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 2 PPAYRP 7
 ||:|
 Db 2 PGFTFP 7

RESULT 14

ID Q7LZJ8 RANTE PRELIMINARY; PRT; 9 AA.
 AC Q7LZJ8
 DT 01-MAR-2004 (TrEMBLrel. 26, Created)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
 DE Bradykinin.
 OS Rana temporaria (European common frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Neobatrachia; Ranidae; Rana;
 OC Rana.
 OX NCBI_TaxID=8407;
 RN [1]
 RP PROTEIN SEQUENCE.
 RA Anastasi A., Erspamer V., Bertaccini G.;
 RT "Occurrence of bradykinin in the skin of Rana temporaria.";
 RL Comp. Biochem. Physiol. 14:43-52(1965).
 DR PIR; A61363; A61363.
 SQ SEQUENCE 9 AA; 1060 MW; 3393D775B9C86777 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 2 PPAYRP 7
 ||:|
 Db 2 PGFTFP 7

RESULT 15

ID Q7LZ17_9NEOB PRELIMINARY; PRT; 9 AA.
 AC Q7LZ17
 DT 01-MAR-2004 (TrEMBLrel. 26, Created)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
 DE Hydroxyproline-3-bradykinin.
 OS Helleophryne purcellii (Cape ghost frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Helleophrynidae;
 OC Helleophryne.
 OX NCBI_TaxID=31911;
 RN [1]
 RP PROTEIN SEQUENCE.
 RA Nakajima T., Yasuhara T., Erspamer G.F., Visser J.;
 RT "Occurrence of Hyp(3)-bradykinin in methanol extracts of the skin of
 RT the South African leptodactylid frog Helleophryne purcellii.";
 RL Experientia 35:1133-1133(1979).
 RN [2]
 RP PROTEIN SEQUENCE.
 RX PubMed=488255;
 RA Nakajima T., Yasuhara T., Erspamer G.F., Visser J.;
 RT "Occurrence of Hyp(3)-bradykinin in methanol extracts of the skin of the
 RT South African leptodactylid frog Helleophryne purcellii.";
 RL Experientia 35:1133-0(1979).
 DR PIR; A43065; A43065.
 SQ SEQUENCE 9 AA; 1060 MW; 3393D775B9C86777 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 2 PPAYRP 7

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Db      2 PPGFSP 7
|| | |
ID BRKP PHYRO STANDARD; PRT; 11 AA.
AC Q7L252;
DT 05-JUL-2004 (Rel. 44, Created)
DT 05-JUL-2004 (Rel. 44, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Phyllokinin (Bradykinyl-isoleucyl-tyrosine O-sulfate).
OS Phyllomedusa rohdei (Rohde's leaf frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC Phyllomedusinae; Phyllomedusa.
OX NCBI_TaxID=8394;
RN [1]
RP PROTEIN SEQUENCE, AND SULFATION OF TYR-11.
RX MEDLINE=67179312; PubMed=5970899;
RA Anastasi A., Bertaccini G., Erspamer V.;
RT "Pharmacological data on phyllokinin (bradykinyl-isoleucyl-tyrosine O-sulfate) and bradykinyl-isoleucyl-tyrosine.";
RL Br. J. Pharmacol. 27:479-485(1966).
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- SIMILARITY: Belongs to the bradykinin family.
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.
CC PIR: A61365; A61365.
DR Bradykinin; Direct protein sequencing; Sulfation; Vasoactive;
DR Vasodilator.
FT MOD_RES 11 11 Sulfotyrosine.
SQ SEQUENCE 11 AA; 1337 MW; 25051393D775B9C8 CRC64;

Query Match 31.1%; Score 23; DB 1; Length 11;
Best Local Similarity 50.0%; Pred. No. 8.8e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
|| | |
Db 2 PPGFSP 7

RESULT 17
BRK_MEGFL STANDARD; PRT; 11 AA.
AC P12797;
DT 01-OCT-1989 (Rel. 12, Created)
DT 01-OCT-1989 (Rel. 12, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Megascoliakinin ((Thr6)bradykinin-Lys-Ala) [Contains: Bradykinin-like
DE peptide ((Thr6)bradykinin)].
OS Megascolia flavifrons (Garden dagger wasp) (Solitary wasp).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Vespoidea;
OC Scolidae; Megascolia.
OX NCBI_TaxID=7437;
RN [1]
RP PROTEIN SEQUENCE.
RC TISSUE=Venom;
RX MEDLINE=87293024; PubMed=3617088; DOI=10.1016/0041-0101(87)90288-1;
RA Yasuhara T., Mantel P., Nakajima T., Piek T.;
RT "Two kinins isolated from an extract of the venom reservoirs of the
RT solitary wasp Megascolia flavifrons.";
RL Toxicon 25:527-535(1987).
RN [2]
RP PROTEIN SEQUENCE.
RC TISSUE=Venom;

RESULT 18
Q712U2 HUMAN PRELIMINARY; PRT; 11 AA.
ID Q712U2;
AC Q712U2;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE M1 muscarinic acetylcholine receptor protein (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=99267322; PubMed=10333492; DOI=10.1042/0264-6021.3400475;
RA Wood I.C., Garriga Canut M., Pepitoni S., Buckley N.J.;
RT "Neuronal expression of the rat M1 muscarinic acetylcholine receptor
RT gene is regulated by elements in the first exon.";
RL Biochem. J. 340:475-483(1999).
DR EMBL; AJ006520; CAA07081.1; -; mRNA.
DR GO; GO:0004872; F:receptor activity; IEA.
FT NON_TER 11 11
SQ SEQUENCE 11 AA; 1071 MW; 982D0BF4C7776DC5 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 11;
Best Local Similarity 66.7%; Pred. No. 8.8e+03;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
|| | |
Db 6 PPAYSP 11

RESULT 19
Q7M4P1 HUMAN PRELIMINARY; PRT; 11 AA.
ID Q7M4P1;
AC Q7M4P1;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)

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DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
 DE 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
 DE Ile-Ser-bradykinin (Fragment).
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP PROTEIN SEQUENCE.
 RX MEDLINE=91166748; PubMed=2076202;
 RA Wunderer G., Walter I., Eschenbacher B., Lang M., Kellermann J.,
 RA Kindermann G.;
 RT "Ile-Ser-bradykinin is an aberrant permeability factor in various
 human malignant effusions.";
 RL Biol. Chem. Hoppe-Seyler 371:977-981(1990).
 DR PIR; S13279; S13279.
 FT NON_TER 1
 FT NON_TER 11
 SQ SEQUENCE 11 AA; 1260 MW; 33D5258B9C86777 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 11;
 Best Local Similarity 50.0%; Pred. No. 8.8e+03;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 Db 4 PPGFSP 9

RESULT 20
 Q712U0 RAT
 ID Q712U0 RAT PRELIMINARY; PRT; 11 AA.
 AC Q712U0;
 DT 05-JUL-2004 (TrEMBLrel. 27, Created)
 DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
 DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
 DE M1 muscarinic acetylcholine receptor protein (fragment).
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
 OC Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RX MEDLINE=99267322; PubMed=10333492; DOI=10.1042/0264-6021:3400475;
 RA Wood I.C., Garriga Canut M., Pepitoni S., Buckley N.J.;
 RT "Neuronal expression of the rat M1 muscarinic acetylcholine receptor
 gene is regulated by elements in the first exon.";
 RL Biochem. J. 340:475-483(1999).
 DR EMBL; AJ006522; CAA07083.1; -; mRNA.
 DR GO; GO:0004872; F:receptor activity; IEA.
 KM Receptor.
 FT NON_TER 11
 FT NON_TER 11
 SQ SEQUENCE 11 AA; 1099 MW; 982D0BF4C7772D5 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 11;
 Best Local Similarity 66.7%; Pred. No. 8.8e+03;
 Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 Db 6 PPAVSP 11

Search completed: April 19, 2006, 19:31:50
 Job time : 235 secs

GenCore version 5.1.1.7
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OM protein - protein search, using sw model

Run on: April 19, 2006, 19:32:46 ; Search time 163 seconds
(without alignments)
33.324 Million cell updates/sec

Title: US-09-277-064-9

Perfect score: 74

Sequence: 1 TPPAYRPPNPAPIL 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 285891

Minimum DB seq length: 0

Maximum DB seq length: 13

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 75 summaries

Database : Published Applications AA Main:

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
- 5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	74	100.0	13	3	US-09-055-744-10
2	74	100.0	13	3	US-09-839-447A-86
3	74	100.0	13	3	US-09-277-074-9
4	74	100.0	13	3	US-09-277-064-9
5	74	100.0	13	3	US-09-788-110A-4
6	74	100.0	13	4	US-10-106-487-22
7	74	100.0	13	4	US-10-128-711-113
8	74	100.0	13	4	US-10-116-118-30
9	74	100.0	13	4	US-10-371-525-49
10	74	100.0	13	4	US-10-371-069-49
11	74	100.0	13	4	US-10-371-645-49
12	74	100.0	13	4	US-10-371-260-49
13	74	100.0	13	4	US-10-372-735-55
14	74	100.0	13	4	US-10-369-060A-86
15	74	100.0	13	4	US-10-388-337-22
16	74	100.0	13	4	US-10-608-541-50
17	74	100.0	13	4	US-10-182-252A-1374
18	74	100.0	13	4	US-10-333-430-63
19	74	100.0	13	4	US-10-470-045-31
20	74	100.0	13	4	US-10-470-045-52
21	74	100.0	13	4	US-10-808-681-5
22	74	100.0	13	5	US-10-691-125-6
23	74	100.0	13	5	US-10-491-008A-51
24	74	100.0	13	5	US-10-820-067A-918
25	74	100.0	13	6	US-11-055-119-80
26	69	93.2	12	4	US-10-732-862A-230
27	69	93.2	13	4	US-10-226-007-600

28	65	87.8	11	5	US-10-654-601-1127	Sequence 1127, Ap
29	65	87.8	11	5	US-10-654-601-1666	Sequence 1666, Ap
30	65	87.8	12	4	US-10-226-007-599	Sequence 599, App
31	65	87.8	13	4	US-10-226-007-613	Sequence 613, App
32	64	86.5	12	4	US-10-226-007-586	Sequence 586, App
33	64	86.5	13	4	US-10-226-007-587	Sequence 587, App
34	62	83.8	11	5	US-10-654-601-392	Sequence 392, App
35	62	83.8	11	5	US-10-654-601-1442	Sequence 1442, Ap
36	61	82.4	11	4	US-10-226-007-598	Sequence 598, App
37	61	82.4	12	4	US-10-226-007-612	Sequence 612, App
38	61	82.4	13	4	US-10-226-007-626	Sequence 626, App
39	60	81.1	11	4	US-10-226-007-585	Sequence 585, App
40	59	79.7	10	2	US-08-344-824-379	Sequence 379, App
41	59	79.7	10	5	US-10-654-601-1148	Sequence 1148, Ap
42	59	79.7	11	5	US-10-654-601-454	Sequence 454, App
43	58	78.4	10	5	US-10-654-601-391	Sequence 391, App
44	58	78.4	10	5	US-10-654-601-1441	Sequence 1441, Ap
45	56	75.7	10	4	US-10-226-007-584	Sequence 584, App
46	55	74.3	9	2	US-08-344-824-311	Sequence 311, App
47	55	74.3	10	5	US-10-654-601-673	Sequence 673, App
48	55	74.3	10	5	US-10-654-601-2017	Sequence 2017, Ap
49	55	74.3	12	4	US-10-732-862A-231	Sequence 231, App
50	54	73.0	9	2	US-08-344-824-370	Sequence 370, App
51	54	73.0	9	5	US-10-654-601-1126	Sequence 1126, Ap
52	54	73.0	10	4	US-10-226-007-597	Sequence 597, App
53	54	73.0	11	4	US-10-226-007-611	Sequence 611, App
54	54	73.0	12	4	US-10-226-007-625	Sequence 625, App
55	54	73.0	13	4	US-10-226-007-639	Sequence 639, App
56	51	68.9	9	4	US-10-371-525-198	Sequence 198, App
57	51	68.9	9	4	US-10-371-069-198	Sequence 198, App
58	51	68.9	9	4	US-10-371-645-198	Sequence 198, App
59	51	68.9	9	4	US-10-371-260-198	Sequence 198, App
60	51	68.9	9	5	US-10-654-601-672	Sequence 672, App
61	51	68.9	9	5	US-10-654-601-1262	Sequence 1262, Ap
62	51	68.9	9	5	US-10-654-601-2016	Sequence 2016, Ap
63	51	68.9	9	5	US-10-654-601-2550	Sequence 2550, Ap
64	50	67.6	9	4	US-10-226-007-596	Sequence 596, App
65	50	67.6	10	4	US-10-226-007-610	Sequence 610, App
66	50	67.6	11	4	US-10-226-007-624	Sequence 624, App
67	50	67.6	12	4	US-10-226-007-638	Sequence 638, App
68	50	67.6	13	4	US-10-226-007-651	Sequence 651, App
69	49	66.2	9	4	US-10-226-007-583	Sequence 583, App
70	47	63.5	8	5	US-10-654-601-390	Sequence 390, App
71	47	63.5	8	5	US-10-654-601-1261	Sequence 1261, Ap
72	45	60.8	8	4	US-10-226-007-582	Sequence 582, App
73	45	60.8	12	4	US-10-161-791-268	Sequence 268, App
74	44	59.5	8	4	US-10-226-007-595	Sequence 595, App
75	44	59.5	8	5	US-10-654-601-1131	Sequence 1131, Ap

ALIGNMENTS

RESULT 1
US-09-055-744-10
; Sequence 10, Application US/09055744
; Publication No. US20010019714A1
; GENERAL INFORMATION:
; APPLICANT: Sia, Charles
; APPLICANT: Chong, Pele
; APPLICANT: Klein, Michel
; TITLE OF INVENTION: HIV-SPECIFIC CYTOTOXIC T-CELL RESPONSES
; FILE REFERENCE: 1038-746
; CURRENT APPLICATION NUMBER: US/09/055,744
; CURRENT FILING DATE: 1998-04-07
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus type 1
US-09-055-744-10

Query Match 100.0%; Score 74; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNPAPIL 13

RESULT 2

US-09-839-447A-86
; Sequence 86, Application US/09839447A
; Patent No. US20020058247A1

; GENERAL INFORMATION:
; APPLICANT: Sallberg, Matti
; TITLE OF INVENTION: SYNTHETIC PEPTIDES THAT BIND TO THE
; FILE REFERENCE: HEPATITIS B VIRUS CORE AND E ANTIGENS
; FILE REFERENCE: TRIPEP.020CPI
; CURRENT APPLICATION NUMBER: US/09/839,447A
; CURRENT FILING DATE: 2001-08-09
; PRIOR APPLICATION NUMBER: 09/556605
; PRIOR FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 111
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 86
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial Peptide

US-09-839-447A-86

Query Match 100.0%; Score 74; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNPAPIL 13

RESULT 3

US-09-277-074-9
; Sequence 9, Application US/09277074
; Publication No. US20030022820A1

; GENERAL INFORMATION:
; APPLICANT: Sherman, Linda A.
; TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS
; FILE REFERENCE: SCR21555
; CURRENT APPLICATION NUMBER: US/09/277,074
; CURRENT FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 08/355,558
; PRIOR FILING DATE: 1994-12-14
; PRIOR APPLICATION NUMBER: PCT/US95/16415
; PRIOR FILING DATE: 1995-12-14
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Hepatitis B virus

US-09-277-074-9

Query Match 100.0%; Score 74; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNPAPIL 13

RESULT 4

US-09-277-064-9
; Sequence 9, Application US/09277064
; Publication No. US20030064916A1

; GENERAL INFORMATION:
; APPLICANT: Sherman, Linda A.
; TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS
; FILE REFERENCE: SCR21528
; CURRENT APPLICATION NUMBER: US/09/277,064
; CURRENT FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 08/355,558
; PRIOR FILING DATE: 1994-12-14
; PRIOR APPLICATION NUMBER: PCT/US95/16415
; PRIOR FILING DATE: 1995-12-14
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Hepatitis B virus

US-09-277-064-9

Query Match 100.0%; Score 74; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNPAPIL 13

RESULT 5

US-09-788-110A-4
; Sequence 4, Application US/09788110A
; Publication No. US20040085518A1

; GENERAL INFORMATION:
; APPLICANT: Zanetti, Maurizio
; TITLE OF INVENTION: A Universal Vaccine and Method for Treating Cancer Employing
; FILE REFERENCE: Telomerase Reverse Transcriptase
; FILE REFERENCE: UCSD-07017
; CURRENT APPLICATION NUMBER: US/09/788,110A
; CURRENT FILING DATE: 2001-02-15
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 4
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Homo sapiens

US-09-788-110A-4

Query Match 100.0%; Score 74; DB 3; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNPAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNPAPIL 13

RESULT 6

US-10-106-487-22
; Sequence 22, Application US/10106487
; Publication No. US20020164721A1

; GENERAL INFORMATION:
; APPLICANT: FIRAT, HUSEYIN
; APPLICANT: LEMONNIER, FRANCOIS
; APPLICANT: LANGLADE-DEMOYEN, PIERRE
; APPLICANT: MICHEL, MARIE-LOUISE
; TITLE OF INVENTION: DESIGN OF A POLYPEPTIDIC CONSTRUCT FOR THE INDUCTION
; TITLE OF INVENTION: OF
; TITLE OF INVENTION: HLA-A2.1 RESTRICTED HIV 1 SPECIFIC CTL RESPONSES USING
; TITLE OF INVENTION: HHD MICE
; FILE REFERENCE: 03495.0196 SEQUENCE LISTING
; CURRENT APPLICATION NUMBER: US/10/106,487

; CURRENT FILING DATE: 2002-03-27
; PRIOR APPLICATION NUMBER: 09/675,673
; PRIOR FILING DATE: 2000-09-29
; PRIOR APPLICATION NUMBER: 60/158,356
; PRIOR FILING DATE: 1999-10-12
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 22
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Hepatitis B virus
US-10-106-487-22

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 7

US-10-128-711-113
; Sequence 113, Application US/10128711
; Publication No. US20030099634A1
; GENERAL INFORMATION:
; APPLICANT: VITIELLO, Maria A.
; CHESTNUT, Robert W.
; SETTE, Alessandro D.
; CELIS, Esteban
; GRAY, Howard

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
CTL IMMUNITY

NUMBER OF SEQUENCES: 153

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend Khourie and Crew
STREET: Steuart Street Tower, One Market Plaza
CITY: San Francisco
STATE: California
COUNTRY: US
ZIP: 94105-1493

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA: US/10/128,711

APPLICATION NUMBER: US/10/128,711

FILING DATE: 22-Apr-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/197,484

FILING DATE: 16-FEB-1994

APPLICATION NUMBER: US 07/935,811

FILING DATE: 26-AUG-1992

APPLICATION NUMBER: US 07/874,491

FILING DATE: 27-APR-1992

APPLICATION NUMBER: US 07/827,682

FILING DATE: 29-JAN-1992

APPLICATION NUMBER: US 07/749,568

FILING DATE: 26-AUG-1991

ATTORNEY/AGENT INFORMATION:

NAME: Parmelee, Steven W.

REGISTRATION NUMBER: 31,990

REFERENCE/DOCKET NUMBER: 14137-26-4

TELECOMMUNICATION INFORMATION:

TELEPHONE: (206) 467-9600

TELEFAX: (206) 623-6793

INFORMATION FOR SEQ ID NO: 113:

SEQUENCE CHARACTERISTICS:

LENGTH: 13 amino acids

TYPE: amino acid

; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 113:
US-10-128-711-113

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 8

US-10-116-118-30
; Sequence 30, Application US/10116118
; Publication No. US20030143672A1
; GENERAL INFORMATION:

; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John D.
; TITLE OF INVENTION: Heteroclitic Analogs and Related Methods
; FILE REFERENCE: 2060.009003
; CURRENT APPLICATION NUMBER: US/10/116,118
; CURRENT FILING DATE: 2002-08-07
; PRIOR APPLICATION NUMBER: US 60/166,529
; PRIOR FILING DATE: 1999-11-18
; PRIOR APPLICATION NUMBER: US 60/239,008
; PRIOR FILING DATE: 2000-10-06
; NUMBER OF SEQ ID NOS: 53
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 30
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: (HBV core)

US-10-116-118-30

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 9

US-10-371-525-49
; Sequence 49, Application US/10371525
; Publication No. US20030203869A1
; GENERAL INFORMATION:

; APPLICANT: Fikes, John D.
; APPLICANT: Hermanson, Gary G.
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn Y.
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert W.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Expression Vectors for Stimulating an
; IMMUNE RESPONSE AND METHODS OF USING THE SAME
; FILE REFERENCE: 39963-2022.01
; CURRENT APPLICATION NUMBER: US/10/371,525
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 09/311,784
; PRIOR FILING DATE: 1999-05-13
; PRIOR APPLICATION NUMBER: US 60/085,751
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 463

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; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-371-525-49

Query Match          100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 10
US-10-371-069-49
; Sequence 49, Application US/10371069
; Publication No. US20030216342A1
; GENERAL INFORMATION:
; APPLICANT: EPIMMUNE Inc.
; APPLICANT: Fikes, John D.
; APPLICANT: Hermanson, Gary G.
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn Y.
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert W.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Expression Vectors for Stimulating an
; FILE REFERENCE: 39963-20022.10
; CURRENT APPLICATION NUMBER: US/10/371,069
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 09/078,904
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: US 60/085,751
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-371-069-49

Query Match          100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 11
US-10-371-645-49
; Sequence 49, Application US/10371645
; Publication No. US20030216343A1
; GENERAL INFORMATION:
; APPLICANT: EPIMMUNE Inc.
; APPLICANT: Fikes, John D.
; APPLICANT: Hermanson, Gary G.
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn Y.
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert W.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Expression Vectors for Stimulating an
```

```
; TITLE OF INVENTION: Immune Response and Methods of Using the Same
; FILE REFERENCE: 39963-20022.11
; CURRENT APPLICATION NUMBER: US/10/371,645
; CURRENT FILING DATE: 2003-06-20
; PRIOR APPLICATION NUMBER: US 09/078,904
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: US 60/085,751
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-371-645-49

Query Match          100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 12
US-10-371-260-49
; Sequence 49, Application US/10371260
; Publication No. US20030220285A1
; GENERAL INFORMATION:
; APPLICANT: EPIMMUNE Inc.
; APPLICANT: Fikes, John D.
; APPLICANT: Hermanson, Gary G.
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn Y.
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert W.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Expression Vectors for Stimulating an
; TITLE OF INVENTION: Immune Response and Methods of Using the Same
; FILE REFERENCE: 39963-20022.13
; CURRENT APPLICATION NUMBER: US/10/371,260
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 09/078,904
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: US 60/085,751
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-371-260-49

Query Match          100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 13
US-10-372-735-55
; Sequence 55, Application US/10372735
; Publication No. US20030225251A1
; GENERAL INFORMATION:
```

APPLICANT: Sallberg, Matti
TITLE OF INVENTION: SPECIFICITY EXCHANGERS THAT REDIRECT
FILE OF INVENTION: ANTIBODIES TO A PATHOGEN
FILE REFERENCE: TRIPEP.7AUC4CP1
CURRENT APPLICATION NUMBER: US/10/372,735
CURRENT FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: 10/234,579
PRIOR FILING DATE: 2002-08-30
PRIOR APPLICATION NUMBER: 09/839,666
PRIOR FILING DATE: 2001-04-19
PRIOR APPLICATION NUMBER: 09/532,106
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 09/246,258
PRIOR FILING DATE: 1999-02-08
PRIOR APPLICATION NUMBER: 08/737,085
PRIOR FILING DATE: 1996-12-27
PRIOR APPLICATION NUMBER: PCT/SE95/00468
PRIOR FILING DATE: 1995-04-27
PRIOR APPLICATION NUMBER: 09/664,945
PRIOR FILING DATE: 2000-09-19
PRIOR APPLICATION NUMBER: 09/664,025
PRIOR FILING DATE: 2000-09-19
PRIOR APPLICATION NUMBER: PCT/IB01/02327
PRIOR FILING DATE: 2001-09-19
PRIOR APPLICATION NUMBER: 10/153,271
PRIOR FILING DATE: 2002-05-21
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 199
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 55
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Artificially Synthesized Peptides
US-10-372-735-55

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
|||||
DB 1 TPPAYRPPNAPIL 13

RESULT 14
US-10-369-060A-86
Sequence 86, Application US/10369060A
Publication No. US20030235815A1
GENERAL INFORMATION:
APPLICANT: Sallberg, Matti
TITLE OF INVENTION: SYNTHETIC PEPTIDES THAT BIND TO THE
FILE OF INVENTION: HEPATITIS B VIRUS CORE AND E ANTIGENS
FILE REFERENCE: TRIPEP.020CP1C1
CURRENT APPLICATION NUMBER: US/10/369,060A
CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: 09/839,447
PRIOR FILING DATE: 2001-04-20
PRIOR APPLICATION NUMBER: 09/556,605
PRIOR FILING DATE: 2000-04-21
NUMBER OF SEQ ID NOS: 111
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 86
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Mus musculus
US-10-369-060A-86

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
|||||
DB 1 TPPAYRPPNAPIL 13

RESULT 15
US-10-388-337-22
Sequence 22, Application US/10388337
Publication No. US20040018208A1
GENERAL INFORMATION:
APPLICANT: Firat, Huseyin
APPLICANT: LEMONNIER, Francois
APPLICANT: LANGLADE-DEMOYEN, Pierre
APPLICANT: MICHEL, Marie-Louise
APPLICANT: SUHREIER, Andreas A
TITLE OF INVENTION: HYBRID OR CHIMERIC POLYNUCLEOTIDES, PROTEINS, AND
FILE OF INVENTION: COMPOSITIONS COMPRISING HEPATITIS B VIRUS SEQUENCES
FILE REFERENCE: 03495.0198 SEQUENCE LISTING
CURRENT APPLICATION NUMBER: US/10/388,337
CURRENT FILING DATE: 2003-03-14
PRIOR APPLICATION NUMBER: US/09/671,198B
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: 60/156,945
PRIOR FILING DATE: 1999-09-30
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 22
LENGTH: 13
TYPE: PRT
ORGANISM: Hepatitis B virus
US-10-388-337-22

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
|||||
DB 1 TPPAYRPPNAPIL 13

RESULT 16
US-10-608-541-50
Sequence 50, Application US/10608541
Publication No. US20040019189A1
GENERAL INFORMATION:
APPLICANT: Matti Sallberg
TITLE OF INVENTION: LIGAND/RECEPTOR SPECIFICITY EXCHANGERS
FILE OF INVENTION: THAT REDIRECT ANTIBODIES TO RECEPTORS ON A PATHOGEN
FILE REFERENCE: TRIPEP.007CP3C1
CURRENT APPLICATION NUMBER: US/10/608,541
CURRENT FILING DATE: 2003-06-27
PRIOR APPLICATION NUMBER: 09/664,945
PRIOR FILING DATE: 2000-09-19
PRIOR APPLICATION NUMBER: 09/532,106
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 09/246,258
PRIOR FILING DATE: 1999-02-08
PRIOR APPLICATION NUMBER: 08/737,085
PRIOR FILING DATE: 1996-12-27
PRIOR APPLICATION NUMBER: PCT/SE 95/00468
PRIOR FILING DATE: 1995-04-27
PRIOR APPLICATION NUMBER: SE 9401460
PRIOR FILING DATE: 1994-04-28
NUMBER OF SEQ ID NOS: 105
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 50
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

; OTHER INFORMATION: Antigenic domain peptide
US-10-608-541-50

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 17

US-10-182-252A-1374
; Sequence 1374, Application US/10182252A
; Publication No. US20040072162A1
; GENERAL INFORMATION:
; APPLICANT: FOMSGAARD, ANDERS
; APPLICANT: BRUNAK, SOREN
; APPLICANT: BUUS, SOREN
; APPLICANT: CORBET, SYLVIE
; APPLICANT: LAUEMOLLER, SANNE LISE
; APPLICANT: HANSEN, JAN
; TITLE OF INVENTION: HIV PEPTIDE AND NUCLEIC ACIDS ENCODING THEM FOR DIAGNOSIS AND
; TITLE OF INVENTION: CONTROL OF HIV INFECTIONS
; FILE REFERENCE: 030307/0205
; CURRENT APPLICATION NUMBER: US/10/182,252A
; CURRENT FILING DATE: 2003-04-10
; PRIOR APPLICATION NUMBER: PCT/DK01/00059
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: EP 00610017.6
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: US 60/179,333
; PRIOR FILING DATE: 2000-01-31
; NUMBER OF SEQ ID NOS: 1388
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1374
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-182-252A-1374

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 18

US-10-333-430-63
; Sequence 63, Application US/1033430
; Publication No. US20040072240A1
; GENERAL INFORMATION:
; APPLICANT: INSERM
; APPLICANT: INSTITUT GUSTAVE ROUSSY
; APPLICANT: KOSMATOPOULOS, Kostas
; APPLICANT: TOURDOT, Sophie
; APPLICANT: SCARDINO, Antonio
; APPLICANT: GROSS, David, Alexandre
; TITLE OF INVENTION: METHOD FOR SCREENING PEPTIDES FOR USE IN
; TITLE OF INVENTION: IMMUNOTHERAPY
; FILE REFERENCE: 33339/259034
; CURRENT APPLICATION NUMBER: US/10/333,430
; CURRENT FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: FR 0009591
; PRIOR FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 63
; LENGTH: 13

; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide
US-10-333-430-63

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 19

US-10-470-045-31
; Sequence 31, Application US/10470045
; Publication No. US20040146505A1
; GENERAL INFORMATION:
; APPLICANT: Scancell Limited
; APPLICANT: Durrant, Linda Gillian
; APPLICANT: Parsons, Tina
; TITLE OF INVENTION: Substances
; FILE REFERENCE: P32181WO/NJL
; CURRENT APPLICATION NUMBER: US/10/470,045
; CURRENT FILING DATE: 2003-07-24
; PRIOR APPLICATION NUMBER: GB 0102145.0
; PRIOR FILING DATE: 2001-01-26
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 31
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-045-31

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
| | | | | | | | | | | | | |
Db 1 TPPAYRPPNAPIL 13

RESULT 20

US-10-470-045-52
; Sequence 52, Application US/10470045
; Publication No. US20040146505A1
; GENERAL INFORMATION:
; APPLICANT: Scancell Limited
; APPLICANT: Durrant, Linda Gillian
; APPLICANT: Parsons, Tina
; TITLE OF INVENTION: Substances
; FILE REFERENCE: P32181WO/NJL
; CURRENT APPLICATION NUMBER: US/10/470,045
; CURRENT FILING DATE: 2003-07-24
; PRIOR APPLICATION NUMBER: GB 0102145.0
; PRIOR FILING DATE: 2001-01-26
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 52
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-045-52

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13

Db |||||||
 1 TPPAYRPNAPIL 13

Search completed: April 19, 2006, 19:36:14
Job time : 164 secs

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OM protein - protein search, using sw model

Run on: April 19, 2006, 19:33:41 ; Search time 28 Seconds
(without alignments)
20.430 Million cell updates/sec

Title: US-09-277-064-9

Perfect score: 74

Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 225428 seqs, 44002918 residues

Total number of hits satisfying chosen parameters: 62723

Minimum DB seq length: 0

Maximum DB seq length: 13

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 75 summaries

Database : Published Applications AA-New:

- 1: /SIDSS/prodata1/pubpaa/US08_NEW_PUB.pap.*
- 2: /SIDSS/prodata1/pubpaa/US06_NEW_PUB.pap.*
- 3: /SIDSS/prodata1/pubpaa/US07_NEW_PUB.pap.*
- 4: /SIDSS/prodata1/pubpaa/PCT_NEW_PUB.pap.*
- 5: /SIDSS/prodata1/pubpaa/US03_NEW_PUB.pap.*
- 6: /SIDSS/prodata1/pubpaa/US10_NEW_PUB.pap.*
- 7: /SIDSS/prodata1/pubpaa/US11_NEW_PUB.pap.*
- 8: /SIDSS/prodata1/pubpaa/US60_NEW_PUB.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	74	100.0	13	6	US-10-491-096-91
2	74	100.0	13	6	US-10-510-101-34
3	74	100.0	13	6	US-10-511-273-10
4	74	100.0	13	7	US-11-188-187A-86
5	42	56.8	10	6	US-10-467-033-103
6	30	40.5	12	7	US-11-252-904-4
7	29	39.2	12	7	US-11-069-858-1
8	28	37.8	13	6	US-10-966-648-9
9	28	37.8	13	6	US-10-966-648-12
10	28	37.8	13	6	US-10-989-226-53
11	28	37.8	13	7	US-11-126-772-9
12	28	37.8	13	7	US-11-126-772-12
13	28	37.8	13	7	US-11-007-772A-45
14	27.5	37.2	12	7	US-11-187-419-9
15	27	36.5	6	7	US-11-004-399-2791
16	27	36.5	7	6	US-10-510-155-69
17	27	36.5	9	7	US-11-196-459-5
18	27	36.5	10	7	US-11-146-854-49
19	26	35.1	9	6	US-10-989-767A-7
20	26	35.1	10	6	US-10-989-767A-74
21	26	35.1	10	6	US-10-989-767A-619
22	26	35.1	10	7	US-11-120-543-47
23	25	33.8	8	7	US-11-247-423-378
24	25	33.8	9	6	US-10-857-484-363
25	25	33.8	9	6	US-10-857-484-2593

26	25	33.8	9	6	US-10-857-484-3140	Sequence 3140, Ap
27	25	33.8	9	6	US-10-857-484-3200	Sequence 3200, Ap
28	25	33.8	9	6	US-10-857-484-3680	Sequence 3680, Ap
29	25	33.8	9	6	US-10-857-484-3768	Sequence 3768, Ap
30	25	33.8	9	6	US-10-857-484-4628	Sequence 4628, Ap
31	25	33.8	9	6	US-10-857-484-4648	Sequence 4648, Ap
32	25	33.8	9	7	US-11-026-403-9	Sequence 9, Appli
33	25	33.8	9	7	US-11-033-039-534	Sequence 534, App
34	25	33.8	10	6	US-10-857-484-635	Sequence 635, App
35	25	33.8	10	6	US-10-857-484-1183	Sequence 1183, Ap
36	25	33.8	10	6	US-10-857-484-2846	Sequence 2846, Ap
37	25	33.8	10	6	US-10-857-484-2907	Sequence 2907, Ap
38	25	33.8	10	6	US-10-857-484-3388	Sequence 3388, Ap
39	25	33.8	10	6	US-10-857-484-3428	Sequence 3428, Ap
40	25	33.8	10	6	US-10-857-484-3964	Sequence 3964, Ap
41	25	33.8	10	6	US-10-857-484-3995	Sequence 3995, Ap
42	25	33.8	10	6	US-10-857-484-5385	Sequence 5385, Ap
43	25	33.8	10	6	US-10-857-484-5759	Sequence 5759, Ap
44	25	33.8	10	6	US-10-857-484-5795	Sequence 5795, Ap
45	25	33.8	10	6	US-10-857-484-5896	Sequence 5896, Ap
46	25	33.8	11	6	US-10-857-620A-3	Sequence 3, Appli
47	25	33.8	11	6	US-10-877-961B-141	Sequence 141, App
48	25	33.8	11	6	US-10-877-961B-221	Sequence 221, App
49	25	33.8	11	6	US-10-957-351-348	Sequence 348, App
50	25	33.8	11	7	US-11-140-553-2	Sequence 2, Appli
51	25	33.8	12	7	US-11-110-274-291	Sequence 291, App
52	25	33.8	12	7	US-11-078-951-4	Sequence 4, Appli
53	25	33.8	13	6	US-10-512-239A-17	Sequence 17, Appli
54	25	33.8	13	7	US-11-127-934-2	Sequence 2, Appli
55	24	32.4	9	7	US-11-218-780-11	Sequence 11, Appli
56	24	32.4	9	7	US-11-257-286-18	Sequence 18, Appli
57	24	32.4	10	7	US-11-045-024-5221	Sequence 5221, Ap
58	24	32.4	10	7	US-11-146-854-46	Sequence 46, Appli
59	24	32.4	11	6	US-10-877-961B-146	Sequence 146, App
60	24	32.4	11	6	US-10-877-961B-150	Sequence 150, App
61	24	32.4	11	6	US-10-877-961B-154	Sequence 154, App
62	24	32.4	11	6	US-10-877-961B-225	Sequence 225, App
63	24	32.4	11	6	US-10-877-961B-229	Sequence 229, App
64	24	32.4	11	7	US-11-012-353-46	Sequence 46, Appli
65	24	32.4	12	6	US-10-507-028-12	Sequence 12, Appli
66	24	32.4	12	7	US-11-145-861-371	Sequence 371, App
67	24	32.4	12	7	US-11-032-773-921	Sequence 921, App
68	24	32.4	13	6	US-10-511-559-464	Sequence 464, App
69	24	32.4	13	6	US-10-511-559-465	Sequence 465, App
70	24	32.4	13	7	US-11-145-861-6	Sequence 6, Appli
71	24	32.4	13	7	US-11-152-974A-415	Sequence 415, App
72	24	32.4	13	7	US-11-152-974A-417	Sequence 417, App
73	24	32.4	13	7	US-11-153-143A-415	Sequence 415, App
74	24	32.4	13	7	US-11-153-143A-417	Sequence 417, App
75	23.5	31.8	9	7	US-11-033-039-327	Sequence 327, App

ALIGNMENTS

RESULT 1

US-10-491-096-91
; Sequence 91, Application US/10491096
; Publication No. US20050267020A1
; GENERAL INFORMATION:
; APPLICANT: FAURE, OLIVIER
; APPLICANT: KOSMATOPOULOS, KONSTANTINOS
; TITLE OF INVENTION: POLYPEPTIDES DERIVED FROM INDUCIBLE HSP70 AND PHARMACEUTICAL
; TITLE OF INVENTION: COMPOSITIONS CONTAINING THE SAME
; FILE REFERENCE: US08-1098
; CURRENT APPLICATION NUMBER: US/10/491.096
; PRIOR FILING DATE: 2004-03-29
; PRIOR FILING DATE: PCT/EP02/10821
; PRIOR FILING DATE: 2002-09-26
; PRIOR FILING DATE: FR 01402496.2
; PRIOR FILING DATE: 2001-09-27
; NUMBER OF SEQ ID NOS: 190
; SOFTWARE: PatentIn version 3.3

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; SEQ ID NO 91
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-491-096-91

Query Match      100.0%; Score 74; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e-05;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
   |||||
Db 1 TPPAYRPPNAPIL 13

RESULT 2
US-10-510-101-34
; Sequence 34, Application US/10510101
; Publication No. US20060018915A1
; GENERAL INFORMATION:
; APPLICANT: Epiimmune Inc.
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John
; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; TITLE OF INVENTION: Heterocyclic Analogs and Related Methods
; FILE REFERENCE: 2060.009PC05
; CURRENT APPLICATION NUMBER: US/10/510.101
; CURRENT FILING DATE: 2004-10-05
; PRIOR APPLICATION NUMBER: US 60/413,471
; PRIOR FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 10/116,118
; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 34
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide derived from Hepatitis B Virus
US-10-510-101-34

Query Match      100.0%; Score 74; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e-05;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
   |||||
Db 1 TPPAYRPPNAPIL 13

RESULT 3
US-10-511-273-10
; Sequence 10, Application US/10511273
; Publication No. US20060034856A1
; GENERAL INFORMATION:
; APPLICANT: KOSMATOPOULOS, KOSTAS
; APPLICANT: ALVES, PEDRO
; TITLE OF INVENTION: EPHA2 ANTIGEN T EPITOPES
; FILE REFERENCE: 260449USOXPC7
; CURRENT APPLICATION NUMBER: US/10/511,273
; CURRENT FILING DATE: 2004-10-21
; PRIOR APPLICATION NUMBER: PCI/FR03/01280
; PRIOR FILING DATE: 2003-04-23
; PRIOR APPLICATION NUMBER: FR 02/05048
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent in version 3.3
; SEQ ID NO 10
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-10-511-273-10

Query Match      100.0%; Score 74; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e-05;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
   |||||
Db 1 TPPAYRPPNAPIL 13

RESULT 4
US-11-188-187A-86
; Sequence 86, Application US/11188187A
; Publication No. US20060020110A1
; GENERAL INFORMATION:
; APPLICANT: Salberg, Matti
; TITLE OF INVENTION: SYNTHETIC PEPTIDES THAT BIND TO THE
; FILE REFERENCE: HEPATITIS B VIRUS CORE AND E ANTIGENS
; FILE REFERENCE: TRIPEP-20CPIC
; CURRENT APPLICATION NUMBER: US/11/188,187A
; CURRENT FILING DATE: 2005-07-22
; PRIOR APPLICATION NUMBER: 10/369,060
; PRIOR FILING DATE: 2003-02-14
; PRIOR APPLICATION NUMBER: 09/839,447
; PRIOR FILING DATE: 2001-04-20
; PRIOR APPLICATION NUMBER: 09/556,605
; PRIOR FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 111
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 86
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically prepared amino acid sequence
US-11-188-187A-86

Query Match      100.0%; Score 74; DB 7; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e-05;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TPPAYRPPNAPIL 13
   |||||
Db 1 TPPAYRPPNAPIL 13

RESULT 5
US-10-467-033-103
; Sequence 103, Application US/10467033
; Publication No. US20060019248A1
; GENERAL INFORMATION:
; APPLICANT: Tiziani, Valdenize
; APPLICANT: Reichenberger, Ernest
; APPLICANT: Ueki, Yasuyoshi
; APPLICANT: Olsen, Bjorn R.
; TITLE OF INVENTION: Mutant SH3-Binding Protein Compositions and Methods
; FILE REFERENCE: H0498.70204US00
; CURRENT APPLICATION NUMBER: US/10/467,033
; CURRENT FILING DATE: 2003-08-01
; PRIOR APPLICATION NUMBER: US 60/266,129
; PRIOR FILING DATE: 2001-02-02
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 103
; LENGTH: 10
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-467-033-103

Query Match      56.8%; Score 42; DB 6; Length 10;
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Best Local Similarity 70.0%; Score 30; DB 7; Length 12;
Matches 7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 2 PPAYRPPNP 11
| | | | |
Db 1 PPAYPPPPVP 10

RESULT 6

US-11-252-904-4
; Sequence 4, Application US/11252904
; Publication No. US20060039911A1
; GENERAL INFORMATION:
; APPLICANT: Gevas, Philip
; APPLICANT: Stephen, Grimes
; APPLICANT: Karr, Stephen
; APPLICANT: Michael, Dov
; TITLE OF INVENTION: Method for the Treatment of Gastroesophageal Reflux Disease
; FILE REFERENCE: ACGUSA
; CURRENT APPLICATION NUMBER: US/11/252,904
; CURRENT FILING DATE: 2005-10-18
; PRIOR APPLICATION NUMBER: US/10/314,057
; PRIOR FILING DATE: 2002-12-06
; PRIOR APPLICATION NUMBER: US/09/700,378
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: PCT/US99/10734
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/085,610
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4
; LENGTH: 12
; TYPE: PRT
; ORGANISM: rat
; FEATURE:
; NAME/KEY: MOD_RES
; LOCATION: (1)..(1)
; OTHER INFORMATION: pyroglutamic acid
US-11-252-904-4

Query Match 40.5%; Score 30; DB 7; Length 12;
Best Local Similarity 71.4%; Score 30; DB 7; Length 12;
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRPP 8
| | | | |
Db 3 PPLRPP 9

RESULT 7

US-11-069-858-1
; Sequence 1, Application US/11069858
; Publication No. US20050249682A1
; GENERAL INFORMATION:
; APPLICANT: Buseman-Williams, Janine
; APPLICANT: Huang, Xueying
; APPLICANT: Wang, Hong
; APPLICANT: Whiting, Gary
; TITLE OF INVENTION: Long Lasting Waterproof Sunscreen Comprising Metal Oxide
; TITLE OF INVENTION: Nanoparticles and Peptide Conditioner
; FILE REFERENCE: CH2985 US CIP
; CURRENT APPLICATION NUMBER: US/11/069,858
; CURRENT FILING DATE: 2005-02-28
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1
; LENGTH: 12
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Skin-binding peptide
US-11-069-858-1

Query Match 39.2%; Score 29; DB 7; Length 12;
Best Local Similarity 55.6%; Score 29; DB 7; Length 12;
Matches 5; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 3 PPAYRPPNP 11
| | | | |
Db 2 PFHSPENAP 10

RESULT 8

US-10-966-648-9
; Sequence 9, Application US/10966648
; Publication No. US20050249734A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, J. Gregor
; APPLICANT: de Lecea, Luis
; APPLICANT: Henriksen, Steven J.
; APPLICANT: Siggins, George R.
; APPLICANT: The Scripps Research Institute
; TITLE OF INVENTION: Antibodies to Cortistatin, Compositions and Methods
; FILE REFERENCE: 14740A-000640US
; CURRENT APPLICATION NUMBER: US/10/966,648
; CURRENT FILING DATE: 2004-10-14
; PRIOR APPLICATION NUMBER: US 08/648,322
; PRIOR FILING DATE: 1996-05-15
; PRIOR APPLICATION NUMBER: US 08/857,389
; PRIOR FILING DATE: 1997-05-15
; PRIOR APPLICATION NUMBER: US 09/766,396
; PRIOR FILING DATE: 2001-01-18
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:rat cortistatin
; OTHER INFORMATION: cleavage product
US-10-966-648-9

Query Match 37.8%; Score 28; DB 6; Length 13;
Best Local Similarity 50.0%; Score 28; DB 6; Length 13;
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRPPN 9
| | | | |
Db 4 PFLQPPH 11

RESULT 9

US-10-966-648-12
; Sequence 12, Application US/10966648
; Publication No. US20050249734A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, J. Gregor
; APPLICANT: de Lecea, Luis
; APPLICANT: Henriksen, Steven J.
; APPLICANT: Siggins, George R.
; APPLICANT: The Scripps Research Institute
; TITLE OF INVENTION: Antibodies to Cortistatin, Compositions and Methods
; FILE REFERENCE: 14740A-000640US
; CURRENT APPLICATION NUMBER: US/10/966,648
; CURRENT FILING DATE: 2004-10-14
; PRIOR APPLICATION NUMBER: US 08/648,322
; PRIOR FILING DATE: 1996-05-15
; PRIOR APPLICATION NUMBER: US 08/857,389
; PRIOR FILING DATE: 1997-05-15
; PRIOR APPLICATION NUMBER: US 09/766,396
; PRIOR FILING DATE: 2001-01-18
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12

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; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: mouse
US-10-966-648-12

Query Match          37.8%; Score 28; DB 6; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy      2 PPAYRPPN 9
Db      4 PPPQQPPH 11

RESULT 10
US-10-989-226-53
; Sequence 53, Application US/10989226
; Publication No. US20050255491A1
; GENERAL INFORMATION:
; APPLICANT: Lee, Frank D.
; APPLICANT: Meng, Xun
; APPLICANT: Afeyan, Noubar B.
; APPLICANT: Gordon, Neal F.
; TITLE OF INVENTION: SMALL MOLECULE AND PEPTIDE ARRAYS AND
; TITLE OF INVENTION: USES THEREOF
; FILE REFERENCE: EPTM-P01-005
; CURRENT APPLICATION NUMBER: US/10/989,226
; CURRENT FILING DATE: 2004-11-15
; PRIOR APPLICATION NUMBER: US 60/519,530
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/532,687
; PRIOR FILING DATE: 2003-12-24
; NUMBER OF SEQ ID NOS: 84
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 53
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-989-226-53

Query Match          37.8%; Score 28; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 1.6e+02;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy      2 PPAYRP 7
Db      7 PPWQP 12

RESULT 11
US-11-126-772-9
; Sequence 9, Application US/11126772
; Publication No. US20060047107A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, Gregor J.
; APPLICANT: de Lecea, Luis
; APPLICANT: Siggins, George R.
; APPLICANT: Henriksen, Steven J.
; TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
; TITLE OF INVENTION: COMPOSITIONS AND METHODS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
; STREET: 10666 North Torrey Pines Road, TPC-8
; CITY: La Jolla
; STATE: California
; COUNTRY: US
; ZIP: 92037
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/11/126,772
; FILING DATE: 10-May-2005
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/10/062,375
; FILING DATE: 30-Jan-2002
; FILING DATE: 30-Jan-2002
; APPLICATION NUMBER: US/08/857,389
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Schmonsees, William

```

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/11/126,772
; FILING DATE: 10-May-2005
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/10/062,375
; FILING DATE: 30-Jan-2002
; APPLICATION NUMBER: US/08/857,389
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Schmonsees, William
; REGISTRATION NUMBER: 31,796
; REFERENCE/DOCKET NUMBER: 22908-0002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 324-7041
; TELEFAX: (415) 324-0638
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; SEQUENCE DESCRIPTION: SEQ ID NO: 9:
US-11-126-772-9

Query Match          37.8%; Score 28; DB 7; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy      2 PPAYRPPN 9
Db      4 PPLQQPPH 11

RESULT 12
US-11-126-772-12
; Sequence 12, Application US/11126772
; Publication No. US20060047107A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, Gregor J.
; APPLICANT: de Lecea, Luis
; APPLICANT: Siggins, George R.
; APPLICANT: Henriksen, Steven J.
; TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
; TITLE OF INVENTION: COMPOSITIONS AND METHODS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
; STREET: 10666 North Torrey Pines Road, TPC-8
; CITY: La Jolla
; STATE: California
; COUNTRY: US
; ZIP: 92037
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/11/126,772
; FILING DATE: 10-May-2005
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/10/062,375
; FILING DATE: 30-Jan-2002
; APPLICATION NUMBER: US/08/857,389
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Schmonsees, William

```

REGISTRATION NUMBER: 31,796
 REFERENCE/DOCKET NUMBER: 22908-0002
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 324-7041
 TELEFAX: (415) 324-0638
 INFORMATION FOR SEQ ID NO: 12:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 13 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 FRAGMENT TYPE: internal
 SEQUENCE DESCRIPTION: SEQ ID NO: 12:
 US-11-126-772-12

Query Match 37.8%; Score 28; DB 7; Length 13;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRPPN 9
 || :||:
 Db 4 PPPQPPH 11

RESULT 13

US-11-007-772A-45
 ; Sequence 45, Application US/1100772A
 ; Publication No. US20060063599A1
 ; GENERAL INFORMATION:

; APPLICANT: Larsen, Bjarne Due
 ; TITLE OF INVENTION: Pharmacologically Active Peptide Conjugates Having a Reduced
 ; TITLE OF INVENTION: Tendency Towards Enzymatic Hydrolysis.
 ; FILE REFERENCE: 50412/008004

; CURRENT APPLICATION NUMBER: US/11/007,772A

; CURRENT FILING DATE: 2004-12-07

; PRIOR APPLICATION NUMBER: 09/341,590

; PRIOR FILING DATE: 1999-07-12

; PRIOR APPLICATION NUMBER: PCT/DK99/00118

; PRIOR FILING DATE: 1999-03-09

; PRIOR APPLICATION NUMBER: DK 0317/98

; PRIOR FILING DATE: 1998-03-09

; NUMBER OF SEQ ID NOS: 134

; SOFTWARE: PatentIn version 3.3

; SEQ ID NO 45

; LENGTH: 13

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic

; FEATURE:

; NAME/KEY: MISC FEATURE

; LOCATION: (1)...(1)

; OTHER INFORMATION: Xaa = Glp

US-11-007-772A-45

Query Match 37.8%; Score 28; DB 7; Length 13;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRPPN 9
 || :||:
 Db 4 PPLQPPH 11

RESULT 14

US-11-187-419-9

; Sequence 9, Application US/11187419

; Publication No. US20060018919A1

; GENERAL INFORMATION:

; APPLICANT: Gu, Xin-Xing

; TITLE OF INVENTION: PEPTIDE MIMOTOPES OF LIPOOLIGOSACCHARIDE

; TITLE OF INVENTION: FROM NONTYPEABLE HAEMOPHILUS INFLUENZAE AS VACCINES

; FILE REFERENCE: NIH267.001C1

; CURRENT APPLICATION NUMBER: US/11/187,419
 ; CURRENT FILING DATE: 2005-07-22
 ; PRIOR APPLICATION NUMBER: PCT/US2004/001457
 ; PRIOR FILING DATE: 2004-01-21
 ; PRIOR APPLICATION NUMBER: US 60/441,928
 ; PRIOR FILING DATE: 2003-01-22
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 9
 ; LENGTH: 12
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic peptide
 US-11-187-419-9

Query Match 37.2%; Score 27.5; DB 7; Length 12;
 Best Local Similarity 58.3%; Pred. No. 1.8e+02;
 Matches 7; Conservative 0; Mismatches 2; Indels 3; Gaps 1;

Qy 4 AYRPP--NAPI 12
 |||||
 Db 1 AYSPTPAEAPI 12

RESULT 15

US-11-004-399-2791
 ; Sequence 2791, Application US/11004399
 ; Publication No. US20060053516A1
 ; GENERAL INFORMATION:

; APPLICANT: Chye, Mee Lee

; APPLICANT: Ramalingam, Sathiskumar

; APPLICANT: Poon, Leo Lit Man

; APPLICANT: Peiris, Joseph Sriyal Malik

; TITLE OF INVENTION: Genetically Modified Plants Comprising SARS-Cov Viral Nucleotic
 ; TITLE OF INVENTION: Sequences and Methods of Use Thereof For Immunization Against

; FILE REFERENCE: 2587/73166/RDK

; CURRENT APPLICATION NUMBER: US/11/004,399

; CURRENT FILING DATE: 2004-12-03

; PRIOR APPLICATION NUMBER: US 60/527,637

; PRIOR FILING DATE: 2003-12-03

; NUMBER OF SEQ ID NOS: 4043

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 2791

; LENGTH: 6

; TYPE: PRT

; ORGANISM: SARS-Cov Virus

US-11-004-399-2791

Query Match 36.5%; Score 27; DB 7; Length 6;
 Best Local Similarity 66.7%; Pred. No. 1.8e+05;
 Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 6 RPPNAP 11
 |||||
 Db 1 RPPSCP 6

RESULT 16

US-10-510-155-69
 ; Sequence 69, Application US/10510155
 ; Publication No. US20060058228A1
 ; GENERAL INFORMATION:

; APPLICANT: Kimberly A. Kelly

; APPLICANT: David A. Jones

; TITLE OF INVENTION: COLON TUMOR SPECIFIC BINDING PEPTIDES

; FILE REFERENCE: 38509-0015US1

; CURRENT APPLICATION NUMBER: US/10/510,155

; CURRENT FILING DATE: 2004-10-05

; PRIOR APPLICATION NUMBER: PCT/US03/10630

; PRIOR FILING DATE: 2003-04-07

; PRIOR APPLICATION NUMBER: US 60/369,850

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; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 145
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 69
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
US-10-510-155-69

Query Match      36.5%; Score 27; DB 6; Length 7;
Best Local Similarity 66.7%; Pred. No. 1.8e+05;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
Db 1 PPAHP 6

RESULT 17
US-11-196-459-5
; Sequence 5, Application US/11196459
; Publication No. US20050266014A1
; GENERAL INFORMATION:
; APPLICANT: SUGIYAMA, HARUO
; TITLE OF INVENTION: TUMOR ANTIGEN BASED ON PRODUCTS OF THE TUMOR SUPPRESSOR
; FILE REFERENCE: 053466/0298
; CURRENT APPLICATION NUMBER: US/11/196,459
; CURRENT FILING DATE: 2005-08-04
; PRIOR APPLICATION NUMBER: US/09/744,815
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/JP99/04130
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: JP 10-218093
; PRIOR FILING DATE: 1998-07-31
; NUMBER OF SEQ ID NOS: 8
; SEQ ID NO 5
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
US-11-196-459-5

Query Match      36.5%; Score 27; DB 7; Length 9;
Best Local Similarity 83.3%; Pred. No. 1.8e+05;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 8 PNAPIL 13
Db 4 PNAPVL 9

RESULT 18
US-11-146-854-49
; Sequence 49, Application US/11146854
; Publication No. US20050277161A1
; GENERAL INFORMATION:
; APPLICANT: University of Virginia Patent Foundation
; APPLICANT: Engelhard, Victor H
; APPLICANT: Zarling, Angela
; APPLICANT: Hunt, Donald F
; APPLICANT: Evans, Anne M
; APPLICANT: Shabanowitz, Jeffrey
; TITLE OF INVENTION: PHOSPHOPEPTIDE ANTIGENS ASSOCIATED WITH MHC MOLECULES
; FILE REFERENCE: 01015-02
; CURRENT APPLICATION NUMBER: US/11/146,854
; CURRENT FILING DATE: 2005-06-07
; PRIOR APPLICATION NUMBER: US 60/578,205

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; PRIOR FILING DATE: 2004-06-09
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 49
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MOD RES
; LOCATION: (4)..(4)
; OTHER INFORMATION: PHOSPHORYLATION
US-11-146-854-49

Query Match      36.5%; Score 27; DB 7; Length 10;
Best Local Similarity 55.6%; Pred. No. 1.7e+02;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 3 PAYRPPNAP 11
Db 2 PRSPPPPRAP 10

RESULT 19
US-10-989-767A-7
; Sequence 7, Application US/10989767A
; Publication No. US20060018917A1
; GENERAL INFORMATION:
; APPLICANT: PARIS, MARY
; APPLICANT: HUBERT, RENE
; APPLICANT: RAITANO, ARTHUR
; APPLICANT: APAR, DANIEL
; APPLICANT: LEVIN, ELANA
; APPLICANT: CHALLITA-EID, PIA
; APPLICANT: JAKOSOVITZ, AYA
; TITLE OF INVENTION: NUCLEIC ACID AND CORRESPONDING PROTEIN NAMED 158P1D7
; TITLE OF INVENTION: USEFUL IN THE TREATMENT AND DETECTION OF BLADDER AND
; FILE REFERENCE: 511582005004
; CURRENT APPLICATION NUMBER: US/10/989,767A
; CURRENT FILING DATE: 2004-11-15
; PRIOR APPLICATION NUMBER: 10/277,292
; PRIOR FILING DATE: 2002-10-21
; PRIOR APPLICATION NUMBER: 09/935,430
; PRIOR FILING DATE: 2001-08-22
; PRIOR APPLICATION NUMBER: 60/227,098
; PRIOR FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: 60/282,739
; PRIOR FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 700
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chemically synthesized peptide motif
US-10-989-767A-7

Query Match      35.1%; Score 26; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.8e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TPPAY 5
Db 5 TPPVY 9

RESULT 20
US-10-989-767A-74
; Sequence 74, Application US/10989767A
; Publication No. US20060018917A1
; GENERAL INFORMATION:
; APPLICANT: PARIS, MARY

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; APPLICANT: HUBERT, RENE
; APPLICANT: RAITANO, ARTHUR
; APPLICANT: AFAR, DANIEL
; APPLICANT: LEVIN, ELANA
; APPLICANT: CHALLITA-EID, PIA
; APPLICANT: JAKOBEVITZ, AYA
; TITLE OF INVENTION: NUCLEIC ACID AND CORRESPONDING PROTEIN NAMED 158PID7
; TITLE OF INVENTION: USEFUL IN THE TREATMENT AND DETECTION OF BLADDER AND
; TITLE OF INVENTION: OTHER CANCERS
; FILE REFERENCE: 511582005004
; CURRENT APPLICATION NUMBER: US/10/989,767A
; CURRENT FILING DATE: 2004-11-15
; PRIOR APPLICATION NUMBER: 10/277,292
; PRIOR FILING DATE: 2002-10-21
; PRIOR APPLICATION NUMBER: 09/935,430
; PRIOR FILING DATE: 2001-08-22
; PRIOR APPLICATION NUMBER: 60/227,098
; PRIOR FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: 60/282,739
; PRIOR FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 700
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 74
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chemically synthesized peptide motif
US-10-989-767A-74

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Query Match      35.1%; Score 26; DB 6; Length 10;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 TTPAY 5
Db      6 TTPVY 10

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Search completed: April 19, 2006, 19:36:48
Job time : 29 secs